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ECONOMIC AND INDUSTRIAL AFFAIRS

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ESSENCE, DEVELOPMENT OF SOCIALIST INTEGRATION EXPLAINED

Sofia MEZHDUNARODNI OTNOSHENIYA in Bulgarian No 6, 1980 pp 76-88

[Article by Krasimir Koev: "Organizational-Economic Forms of Socialist Integration: Nature, Development, Systematization"]

[Text] Joint organizational-economic forms appear and develop in the course of active cooperation and integration within the system of CEMA-member countries. Being a relatively new and insufficiently studied phenomenon in international socialist economic relations, their separate and joint functioning involves the solution of a number of economic, legal and organizational problems. The present article studies the process of the appearance and development of organizational-economic forms and the development of their system. An attempt has been made to analyze the structure of this system and the problems related to the development of its elements and ties.

The organizational-economic forms of socialist integration may be defined as relatively autonomous international formations[1] aimed at coordinating the activities of their members (participants) or engaged in cooperation and integration activities within a specifically determined economic area. Practical experience is familiar with intergovernmental economic organizations, international economic associations, companies, joint enterprises, mixed commissions, committees, councils, laboratories, bureaus, institutes, task forces and others. They combine the material, financial or cadre resources of member countries. With such unification the national origin of the resources is indirectly changed by the international form of their joint handling. That is why international formations are a direct manifestation of the process of rapprochement and integration among CEMA-member countries.

The organizational-economic forms of socialist integration are the result of the internationalization of production and science within the comity of CEMA-member countries. Their activities help to create favorable conditions for the coordination of national economic and scientific and technical development, the intensification of international specialization and cooperation, the development of technical and technological "compatibility" of national production facilities and the rational utilization of production capacities. Their purpose is to accelerate the optimum complementing, adaptation and interweaving of reproduction processes in CEMA-member countries.

The appearance of joint organizational-economic forms is based on the level of maturity reached in relations among socialist countries. Their activities contribute

to the intensification of cooperation and integration process. That is why they are the result of the energizing of the process of all-round rapprochement among the members of the socialist integration community and, at the same time, are a characteristic indicator and factor of this process.

The specifics of the individual periods in the development of international socialist economic relations leave their mark on the appearance and improvement of the activities of international formations. A brief review of this historical process indicates that as cooperation and economic integration among CEMA-member countries intensifies, joint organizational-economic methods expand, become richer, and gradually acquire an integrational content.

In the period which preceded socialist integration, joint organizational-economic forms were mainly of intergovernmental or interdepartmental nature. The beginning of this period was marked by the founding of CEMA. When they founded this international organization, the first of its kind, the socialist countries set themselves modest tasks involving reciprocal exchange of economic experience and aid in providing raw materials, food, machines and installations and technical assistance.[2] In accordance with its tasks and structures, the organization assumed its embryonic aspect: CEMA as a permanent organ--a bureau consisting of one representative of each member country and a small secretariat.[3]

In the first years which followed the founding of CEMA, cooperation among socialist countries was mainly focused on commerce. During that period, in order to insure favorable prerequisites for the development of transportation and communications, two infrastructural organizations were set up: Organization for Railroad Cooperation and the Organization for Cooperation Among Socialist Countries in the Areas of Electric Power and Mail Ties. They involved the participation of all socialist countries.[4]

In the second half of the 1950s the CEMA-member countries undertook to coordinate the development of the production area. Gradually, the basic international sectors became included in this process. During that period 11 permanent CEMA commissions were set up for the purpose of organizing multilateral cooperation among ministries and departments and among the planning organs of the member countries. The CEMA bylaws were adopted toward the end of the 1950s. Its main purpose was to assist the planned development of the national economy, accelerate economic and technical progress and raise the standards of industrialization of countries with a less developed industry and insure the steady growth of labor productivity and the upsurge of the people's prosperity of member countries.[5] It was thus that, as the cooperation developed, the structure of CEMA and its objectives and tasks changed.

Bilateral relations among countries intensified and strengthened with the development of multilateral cooperation. By the end of the 1950s and the beginning of the 1960s most of the bilateral intergovernmental commissions (committees) for economic and scientific and technical cooperation had already been created.

In the 1960s cooperation among CEMA-member countries intensified and, gradually, assumed a comprehensive nature. Cooperation relations were developed in the main national economic sectors. The first international systems (electric power, payments) were set up. During that period as well relations among countries were mainly on the intergovernmental level. During that period international sectorial

coordination organizations were set up, such as Intermetal (1964), Organization for Cooperation in the Bearings Industry (1964), Agromash (1965), Interkhim (1969) and the organizations for the management of unified systems such as the central dispatcher administration (1962), the International Bank for Economic Cooperation (1963) and others.[6]

The CEMA Executive Committee and its bureau on related problems of economic plans[7] were set up in the 1960s. The permanent commissions were reorganized and raised to 19. The CEMA Standardization Institute was set up.

By the end of the 1960s and the beginning of the 1970s the CEMA-member countries had developed objective prerequisites for the establishment of profound and stable relations among the national economies. A process of international socialist economic integration became apparent. It was in those circumstances that international economic organizations--organizational-economic forms developed on the micro level--appeared. The development of multilateral direct relations in the scientific and technical area in that period led to the development of international councils heading the activities of currently functioning 56 coordination centers.[8] This led to the appearance, in its most general aspect, of the family of organizational-economic forms of socialist integration currently operating at all national economic levels.

Amendments were made to the CEMA bylaws and structure in accordance with the development of objective economic processes. The three CEMA committees were set up.[9] The Comprehensive Program, adopted in 1971, updated the purpose of the organization. Currently, CEMA is contributing to the "further intensification and advancement of cooperation and development of socialist economic integration, the planned development of the national economy, the acceleration of economic and technical progress, the enhanced level of industrialization of countries with a less developed industry, the steady growth of labor productivity, the gradual rapprochement and equalization of levels of economic development and the steady upsurge of the prosperity of the peoples of member-countries."[10]

Organizational autonomy is the general characteristic feature of the organizational-economic forms of socialist integration. It is the criterion of the existence of this international form. Some additional forms enjoy economic and juridical autonomy. Economic autonomy involves the contribution of specific types of property and relations based on this fact, while juridical autonomy involves the possibility of such formations to assume rights and obligations. The level of organizational, economic and juridical autonomy of joint organizational-economic forms may vary greatly. It is on this basis that their most general classification may be defined, as follows:

First, organizational-economic forms lacking economic or juridical autonomy. They may be permanent or temporary and may coordinate the actions of their members at different national economic levels. Basically they are not permanent. They may exist separately or within higher international formations in which they play an auxiliary role. They exist as joint (mixed) commissions,[11] task forces,[12] scientific and technical councils,[13] conferences,[14] committees,[15] scientific collectives,[16] joint collegiums,[17] economic councils[18] and others. Economic or legal publications have not sufficiently analyzed the activities and problems of these forms.

Second, forms with organizational and economic but not juridical autonomy. As a rule, they operate on the microeconomic level. Their activity is mainly that of coordinating. In some cases, however, they may engage in independent activities (economic, scientific and technical and so on). They are usually headed by a joint organ--a council of representatives of participating parties. Within the limits of their rights their current activities are conducted by an authorized participant (participants). This includes international economic companies,[19] cadre training centers[20] and others.

Third, forms having organizational, economic and juridical autonomy. The are permanent and function at different national economic levels. They may engage in coordinating activities or pursue their own economic, scientific and technical and other projects. They are headed by a joint organ consisting of representatives of member countries. This includes intergovernmental economic organizations,[21] international economic associations,[22] joint enterprises,[23] institutes,[24] banks[25] and others. Together with the second group of organizational-economic forms, they form the group of relatively better studied international economic organizations of CEMA-member countries.

From the viewpoint of the scope of the reproduction process and the participation, level and area of activity, each of the three types has its specific organizational-economic forms.[26] In the presence of favorable objective prerequisites and proper agreements, any such form may be changed and assume one or another variety. That is why it would be justified, at the stage of the study of the expedience of the development of higher type forms, to use some temporary forms such as task forces, collectives or conferences. At a latter stage such relatively "low" forms could develop into international organizations of a different type.

The organizational-economic forms of socialist integration may engage in two basic types of activities: coordination--in terms of its members (participants), and autonomous--production, scientific and technical, trade, engineering and so on. This functional variety assigns them a particular role in the economic system of CEMA-member countries. The joint formations engaged in autonomous activities (enterprises, banks, institutes, laboratories and others) are specific cells (subsystems) of the system which, together with the national economies of the individual countries, form the system's basic structure. The forms engaged in coordination operate through coordination at different levels aimed at maintaining the functional balance within the system. Such activities classify them as parts of the specific organs of the system operating the individual sectors of international economic life.[27]

Currently CEMA has a large number of different organizational-economic forms of socialist integration.[28] Put together, they represent a system in the course of formation and improvement.[29] This conclusion is based on the following considerations: first, most generally stated, the purpose of the functioning of international formations is the same: to contribute to the satisfaction of the needs of the members (participants) for a specific commodity or type of activity through joint or coordinated efforts; second, in the course of their functioning, their activities become interwoven, expanded and synchronized;[30] third, a certain hierarchy exists among them based on the different national economic levels of their organization and functioning.

The system of organizational-economic forms of socialist integration are based on the national organizational-economic structure. Its purpose is to coordinate such structures within a single homogeneous organism. Conventionally, this system may be separated into two relatively autonomous subsystems: the multilateral and the bilateral. Even though they maintain close functional ties between them and contribute through their activities to the solution of various problems within the single process of cooperation and integration, and even though they essentially are supplementary, the bilateral and multilateral forms are manifestations of the specific nature of the relations which determine them and are essentially different means leading to the same end.

Currently, international formations are operating at all basic national economic levels. Each separate level has its specific features.[31] The sovereign nature of the socialist countries and the centralized nature of their national economic systems, unified by the single nature of the socialist ownership system, ascribe to the state level a decisive position in international relations.[32] This is the basis for the important role played by intergovernmental organization and economic forms which operate on the level of governments, ministries, committees, and other state organs.

CEMA is the basic intergovernmental organization operating within the integration system. The activities of its organs enable the countries to influence, on a coordinated and purposeful basis, the process of socialist cooperation and integration and focus their efforts on the most important areas and directions of this process.

Also functioning on the state level are the bilateral intergovernmental commissions (committees) for economic and scientific and technical cooperation. They consist of two national parts each headed by a respective chairman. They meet periodically. Their auxiliary organs consist of subcommissions, task forces, and others. The bilateral intergovernmental commissions (committees) have a broad range of competence in the realm of production cooperation, trade and scientific and technical cooperation.[33] The level on which they operate predetermines their decisive role in the development of bilateral economic relations within the comity.

In individual cases permanent commissions may be set up at the intergovernmental level in charge of coordinating cooperation among interested CEMA-member countries in the implementation of international agreements of particular importance.[34]

The CEMA committees, permanent commissions and conferences operate on the departmental level. These are CEMA organs set up in all most important sectors and areas of international socialist economic relations. Their purpose is to synchronize the cooperation among national industries, committees, departments and others. They consist of delegations which are, as a rule, chaired by the head of the corresponding state organ. In order to insure the systematic study of specific problems and work on them, they set up permanent work organs[35] (sections, permanent task forces, scientific and technical councils and others); they set up temporary organs such as conferences of experts, task forces and others for work on specific assignments.

As we mentioned, the CEMA-member countries set up specific international systems dealing with payments, electric power, communications and others. They entrusted their management to special organizations operating on the departmental level. Essentially, these are intergovernmental coordination organs synchronizing the work

of the systems. Their activities lead to the efficient use of the systems, the parallel utilization of national capacities, the creation of conditions for the better operation, maintenance and repairs, the coordination of tests and scientific research, the formulation of uniform standards and others. As integration develops and as new international systems are established, in all likelihood their number will be increased and their functions expanded. Such organizations may acquire the right to ownership of the projects they manage and to organize not only their repair, but production, marketing and so on and, essentially, come closer to the level of international economic organizations.[36]

The intergovernmental sectorial organizations operate on the departmental level as well. Their purpose is to coordinate the activities of the member countries in the field of cooperation in specific economic, scientific and technical areas and individual sectors, subsectors and production facilities.[37] Their position within the integration system has not been sufficiently clarified. The position formulated in the Comprehensive Program does not provide an exhaustive answer to this question.[38] In practice there is a far greater confusion and duplication of their functions with those of CEMA organs (the permanent commissions in particular). For this reason we believe that if a CEMA organ operates in a given area (sector) it would be expedient for intergovernmental economic organizations to operate on the sectorial level.[39]

A variety of bilateral organizational-economic forms operate on the departmental level. There are joint permanent or temporary task forces on the level of the ministers or deputy ministers, mixed commissions[40] on the level of representatives of ministries and departments, permanent commissions on the level of intergovernmental commissions (committees), joint meetings of collegiums of related industries and others. As a rule, the activities of such bilateral forms are functionally related. They supplement and concretize the activities of bilateral intergovernmental commissions (committees) for economic and scientific and technical cooperation.

Currently no bilateral intergovernmental coordination organizations are operating on this level. Organizations of this kind, such as Agromash, became multilateral after they were joined by the USSR and, subsequently, by the GDR and Poland. The establishment of bilateral intergovernmental coordination organizations is entirely possible. At this level, however, similar problems could be resolved without the setting up of special organizations as well.

In our view, the question of the functioning of joint economic organizations on the departmental level should be considered. Currently several organizations have been set up on this level, consisting mainly of bilateral joint enterprises. Furthermore, documents establishing some intergovernmental economic organizations such as Agromash and Interkhim stipulate possibilities for engaging in direct economic activities. Organizations of this kind (Interkhim, Intermetal) have studied such possibilities. Specific economic activities are not inherent in intergovernmental sectorial organizations whose purpose is to coordinate on the macro level processes of economic cooperation and integration. Such activities are the province of organizations set up and operating on a lower level, such as associations, enterprises or combines.[41] As to the joint enterprises of CEMA-member countries, at the present stage, while this form remains experimental, they must continue to operate on the level of national ministries, departments or committees. The development of integration will call for joint enterprises to be built on the proper level as national economic organizations and within the system of international organizations (as their branches or subunits).

This stipulation must not be considered absolute. It is entirely justifiable for big joint enterprises and associations to operate on the departmental level and be engaged in the production of high-series commodities or of goods considered particularly important in a national economy. In all likelihood this would be the organization base for the developing sectorial and intersectorial national production complexes.[42] Such complexes are being organized on the basis of stable relations developed in the course of the national specialization and cooperation among CEMA-member countries.[43]

The next level at which international formations operate is that of national economic organizations. In this area we note the greatest variety of forms engaged in specific coordination and/or joint economic activities in production, scientific research or design operations, services and foreign trade. Organizations which function mainly on this level are bilateral and multilateral international economic companies, enterprises, associations, international institutes, laboratories and centers. In addition to these organization, gradually lower form of organizations are created such as joint collectives, scientific and technical production councils, joint planning-design bureaus and others.

In recent years the so-called coordination centers have proved to be a useful form of scientific and technical cooperation and integration on the micro level. They are based on contracts among respective ministries, departments or scientific and other organizations. The countries do not have to contribute material or manpower resources for their establishment. Their functions are entirely performed by a specific scientific research or other organization. Their activities are mainly that of coordinating and informing. The coordination center is the embryonic form of a joint economic organization, for its activities are international and it is headed by a council whose members represent the individual countries. Real prerequisites exist for the organizational structure of coordination centers to be applied in production cooperation as well. In some cases this would make it possible for current coordination activities on the micro level to be carried out by the machinery of big national units without the creation of an international organization.

Economic relations on the micro level are the most concrete and specific of all. Their development establishes a real foundation for economic rapprochement. It is on this level that a variety of theoretically and practically interesting international formations are established.[44] The useful experience gained as a result of their functioning remains unstudied and has been insufficiently popularized.[45]

These levels of interaction among national economic socialist units, achieved through international formations, do not cover their entire rich variety. Intermediary or integrated forms may be developed. As a rule, these are task forces, conferences or commissions consisting of representatives of CEMA organs, of international economic organizations, national organs or organizations. In most cases they are temporary.

The hierarchical structure of the national economic systems determines a certain hierarchy in the system of organizational-economic forms of socialist integration as well. Currently, such form function at all national economic levels. However, relations among them are not consistent with the hierarchy and unity of national economic structures.

As we emphasized, CEMA is the natural center of the system of organizational-economic forms of socialist integration. It operates on the highest national economic level and has the broadest range of competence for the optimal combination among the national interests of individual member countries and of the comity as a whole. Even though in recent years (particularly after the 32nd CEMA session, held in 1978, which approved a set of measures for the further improvement of cooperation among member countries and of the council's activities) effective measures have been taken to improve the activities of international formations in the area of integration, not all possibilities have been exhausted in this respect. Here the most important problem is that of asserting and strengthening the role of CEMA organs within the system of organizational-economic forms of integration not only in the course of their establishment[46] or elaboration of their legal base,[47] but in the process of planning, management, assessment, and control of their current activities as well. This would increase the purposefulness of the system and upgrade its effectiveness. The real conditions for achieving this could be created through the ever more active involvement of international formations in the solution of the basic problems of economic development of the comity, under CEMA guidance. The elaboration and implementation of some long-term target cooperation programs (DTsPS) provide practical experience in this area.

The study of the multilateral organizational-economic forms has indicated that the ties among "CEMA organs--intergovernmental economic organizations," "CEMA organs--international economic organizations" and "intergovernmental economic organizations--international economic organizations" are not direct. This conceals possibilities for the duplication of functions and decentralization of activities. The objective need arises for the contractual regulation of relations among "CEMA-intergovernmental economic organizations-international economic organizations" operating in a specific national economic area (sector). Currently relations between CEMA and the remaining economic organizations[48] may be considered adequately regulated, whereas relations between "intergovernmental economic and international economic organization" must be set up more thoroughly. It would be expedient to give priority to organizations operating on the higher level. Such relation hierarchy should be regulated through the constituent documents of newly created organizations.

The synchronization between bilateral organizational-economic forms operating at different levels is relatively better. It is achieved by linking their activities with the decisions of bilateral intergovernmental commissions (committees) for economic and scientific and technical cooperation. Another topical problem is that of coordinating the work of multilateral and bilateral formations. Basically, a determining role should be assigned to the multilateral intergovernmental forms represented by CEMA and its organs.[49]

Some difficulties in the functioning of the system of organizational-economic forms of integration are created by differences among the national organizational-economic structures and economic mechanisms. Currently the central state organs of CEMA-member countries perform generally similarly functions. More substantial differences exist in the economic and juridical status of the national economic organizations. These differences lead to some disparities in the level of participation in individual formations and their rights and competences. Conditions are created for the development of so-called diagonal relations which are unequal juridically and economically and which create difficulties in the work of the international economic organizations. That is why we must consider the task of gradually standardizing the rights of the

national organizations and organs involved in international relations and, particularly, involved in the work of the international formations of CEMA-member countries.

Now, when socialist economic integration is in its initial period, the functioning of international formations involves the elimination of a number of difficulties. This applies, above all, to the international economic organizations whose activities are hindered by the objective conditions governing the current development of integration processes--differences in economic and scientific and technical development, shortcomings in the mechanism of joint planning activities, some imperfections in the foreign exchange rate and the price setting system in reciprocal trade, differences in the national status of such organizations and so. Despite this, the international formations are proving to be a useful, promising phenomenon in the economic life of CEMA-member countries. The development of cooperation and integration creates ever more favorable economic and juridical conditions for their development and functioning, for improving their activities and for enhancing their significance. The system of organizational-economic forms of socialist integration is shaping up, expanding, and assuming a richer content. Gradually, its "empty cells" are filled by newly established units which are helping to create an ever greater internal unity and cohesion in the socialist integration community.

FOOTNOTES

1. The term "international formation" was used by Professor V. Tadzher in his article "The International Institutional Mechanism of Socialist Economic Integration (a Concept)," in PRAVNA MISUL, no 1, 1977, and elsewhere. A similar meaning has been given to this term in the present article. Let us note, however, that the international formation can be both a permanent and a temporary instrument of socialist economic integration.

2. See "Vunshna Politika na NRB" [Foreign Policy of the Bulgarian People's Republic] (collection of documents and materials), vol 1, Sofia, 1970, pp 144-145.

3. N. V. Fadeyev, "Sovet Ekonomicheskoy Vzaimopomoshchi" [CEMA], Moscow, 1974, p 64.

4. "Mnogostoronneye Ekonomicheskoye Sotrudnichestvo Sotsialisticheskikh Gosudarstv" [Multilateral Economic Cooperation Among Socialist States], Moscow, 1972, pp 322 and 373.

5. "Mezhdunarodnyye Organizatsii Sotsialisticheskikh Stran" [International Organizations of the Socialist Countries], Moscow, 1971, p 84.

6. P. A. Tokareva, "Uchrezhdeniye Mezhgosudarstvennykh Ekonomicheskikh Organizatsiy Stran-Chlenov SEV" [The Establishment of Intergovernmental Economic Organizations Among CEMA-Member Countries], Moscow, 1976, pp 19-20; "Mezhdunarodni Sotsialistichski Stopanski Obedineniya--Problemi, Perspektivi" [International Socialist Economic Association--Problems, Prospects], Varna, 1977, pp 11-14.

7. The CEMA Executive Committee and Bureau on Related Problems of Economic Plans were established by decision of the 16th (extraordinary) CEMA session held in 1962.

8. "Sovet Ekonomicheskoy Vzaimopomoshchi--30 Let" [30 Years of CEMA], Moscow, 1979, p 71.

9. Cooperation in planning, scientific and technical cooperation and cooperation in material and technical supplies.

10. CEMA bylaws, in "Sbornik ot Aktove po Mnogostrannoto Ikonomicheesko Sutrudnichestvo Mezhdu Durzhavite-Chlenki na Siv" [Collection of Laws on Multilateral Economic Cooperation Among CEMA-Member Countries], Sofia, 1979, p 74.

11. Such as, for example, bilateral intergovernmental commissions for economic and scientific and technical cooperation with their subcommissions, mixed commissions of representatives of foreign trade ministries in charge of observing the implementation of bilateral trade agreements and protocols, and problems commissions for multilateral scientific cooperation (in molecular biology, planetary geophysical studies, studies of semiconductors) and so on.

12. Such as, for example, the permanent task force for economic and scientific and technical cooperation in transportation between Bulgaria and the USSR, the temporary task forces set up by CEMA of specialists on the coordination of basic technical requirements and determining the import needs of the countries in the areas of radio engineering and electronics, ferrous and nonferrous metallurgy, the chemical industry and others.

13. Such as, for example, most scientific and scientific and technical councils or coordination centers.

14. Such as, for example, the Conference of Representatives of Academies of Sciences of Socialist Countries, the Conference of Deputy Chairmen of Academies of Social Sciences of the Socialist Countries and others.

15. Such as, for example, the Coordination Committee for Scientific Instrument Making and Automation of Scientific Research (of academies of sciences of socialist countries).

16. Such as, for example, the temporary international scientific research collective of the Central Institute for Physical Research in Budapest, the temporary international scientific research collective for reactor-physical research in the critical assembly of water-water power reactors and others.

17. For example, periodical meetings of collegiums are held by the USSR Ministry of Nonferrous Metallurgy and the Bulgarian Ministry of Metallurgy and Mineral Resources.

18. For example, a council of chief designers was set up for the application of the Ryad Unified Computer System.

19. Such as, for example, Interetalonpribor, Interelektrotest, Dunaytrans, Intermorput and others.

20. Such as, for example, the International Center of the Academies of Sciences of Socialist Countries for Upgrading the Skill of Scientific Cadres in Electronic Microscopy, the International Center of the Academy of Sciences of Socialist Countries for Upgrading the Skill of Scientific Cadres on Heat and Mass Exchange and the Stefan Banakh International Mathematics Center.

21. Such as, for example, Intermetal, Interlim, Interelektro, the Central Dispatcher Administration, OSLP, Intersputnik and others.

22. Such as, for example, Interatominstrument, Interatomenergo, Intertekstilmash and Interkhimvlakno.

23. Such as, for example, Haldex, Druzhba, Erdenat, Dunav and others.

24. Such as, for example, the Joint Institute for Nuclear Research, the International Scientific Research Institute on Management Problems and others.

25. Such as, for example, the International Bank for Economic Cooperation and the International Investments Bank.

26. On this basis a more detailed classification system of the organizational-economic forms of socialist integration could be drawn up. Some publications provide a relatively more detailed study and classification of the last two types--the international economic organizations (see K. Lozanov and G. Danov, "Mezhdunarodni Stopanski Organizatsii na Stranite-Chlenki na SIV" [The International Economic Organizations of CEMA-Member Countries], Sofia, 1979; "Problemy Funktsionirovaniya Sovmestnykh Predpriyatiy Stran SEV" [Problems of the Functioning of Joint Enterprises of CEMA-Member Countries], Sofia, 1975; "Mezhdunarodni Sotsialisticheski Stopanski Obedineniya--Problemi, Perspektivi" [International Socialist Economic Associations--Problems, Prospects], Varna, 1977; V. Tadzher, "Spetsializirani Mezhdunarodni Ikonomicheski Organizatsii na Stranite-Chlenki na SIV" [Specialized International Economic Organizations of CEMA-Member Countries], Kl. Okhridski Sofia University, 1976; P. Tokareva, op cit [see note 6]; A. Apro, "Mezhdunarodnyye Organizatsii Stran-Chlenov SEV" [International Organization of CEMA-Member Countries], Moscow, 1972; V. Libansky, "Mezinarodni Socialisticke Organizac pro Hospodarskou a Vedecktechnickou Spolupraci" [International Socialist Organizations for Economic and Scientific and Technical Cooperation], Prague, 1980 and others).

27. See Zh. Aroyo, "Svetovnata Sotsialisticheska Ikonomicheska Sistema--Sushtnost, Proizvoditerni Sili i Pazar" [The World Socialist Economic System--Nature, Productive Forces and Market], Sofia, 1977, pp 31-34.

28. About 25 intergovernmental economic organizations, 8 international economic associations, 9 international economic companies, 7 joint enterprises, 56 coordination centers and a number of temporary or permanent commissions, councils, task forces, conferences, committees and so on are operating on a multilateral or bilateral basis.

29. Soviet jurist P. Tokareva has written that a system of international organizations of the socialist states was formed as early as 1967 when about 10 international economic organizations of CEMA-member countries were in

operation while international economic associations and companies did not exist as yet (see SOVETSKOYE GOSUDARSTVO I PRAVO, no 10, 1967, p 65). Quite justifiably, today Professor V. Tadzher claims that, "for quite some time international formations for socialist economic and scientific and technical cooperation have not been accidental or worked separately. The Comprehensive Program faced them with common tasks and requirements and thus, by introducing a system, created the big family of CEMA-member countries" (see his article in PRAVNA MISUL, no 1, 1977, pp 30-31).

30. Ever more active direct or indirect relations are established among international formations on the course of the energizing of socialist integration. This is characteristic not only of the units operating within the same or related sectors. Thus, for example, all multilateral organizations have relations with CEMA; bilateral organizations maintain relations with the respective intergovernmental commissions, while economic organizations (if necessary) have relations with international banks and so on.

31. Soviet economists V. Vorotnikov and A. Belyayev have described the existence of a particular kind of "division of labor" in the management of international economic relations in the book "Ikonomicheski Mekhanizum na Upravleniye na Sotsialichticheskata Integratsiya" [The Economic Management Mechanism of Socialist Integration], Sofia, 1976, p 217.

32. "The first (and most important, key) level of interaction among socialist national economic complexes is precisely the one on the state, the macroeconomic level (see Yu. Shiryayev, "Sotsialisticheskata Integratsiya i Mezhdunarodnoto Razdeleniye na Truda" [Socialist Integration and International Division of Labor], Sofia, 1977, p 69).

33. A description of the tasks and functions of the Intergovernmental Bulgarian-Soviet Commission on Economic and Scientific and Technical Cooperation is Provided G. St. Georgiev in the book "Ikonomicheskite Vruzki Mezhdu NRB i SSSR i Tyakhnoto Upravlenie" [Economic Relations Between Bulgaria and the USSR and Their Management], Sofia, 1977, pp 117-119.

34. An intergovernmental commission on general coordination of cooperation among interested CEMA-member countries and Yugoslavia has been in operation since 1979 for the implementation of the agreement on multilateral specialization and cooperation of production and reciprocal supplies of equipment for nuclear electric power plants; a similar commission was set up in connection with the laying of the main gas pipeline between Orenburg and the western border of the USSR.

35. The CEMA Committee for Cooperation in Planning, which is a permanent task force operating on the level of the deputy chairmen of central national planning organs has set up a bureau; a permanent task force on the fuel-energy balance is operating on the level of the department heads.

36. V. G. Timoshin, "Razvitiye Otnosheniy Planomernosti v Mirovoy Sotsialisticheskoy Sisteme Khozyaystva" [Development of Planning Relations in the World Socialist Economic System], Moscow, 1974, pp 103-105.

37. Complex Program for the Further Intensification and Advancement of Cooperation and for the Development of Socialist Economic Integration Among CEMA-Member Countries, Sofia, 1971, p 71.

38. "Newly created intergovernmental economic organization must essentially carry functions which cannot be fulfilled by CEMA organs or by international economic organizations" (ibid, p 71).

39. In practical terms the realm of activities of the functioning intergovernmental sectorial organizations is more limited compared with that of the corresponding permanent CEMA commission: Interkhim operates in the area of low-volume chemical output; Intermetal coordinates non-contingent volume of trade; Agromash coordinates the technical development of production of machinery for truck gardening, viticulture and fruit growing.

40. Thus, for example, the trade agreements between Bulgaria and the GDR, Cuba, Poland, Hungary and Czechoslovakia for the 1971-1975 period stipulated that establishment of mixed commissions representing the respective ministries of foreign trade. Most generally, their task was to control the state of contracting and implementation of deliveries, formulate measures for the elimination of some difficulties in connection with reciprocal trade and payments, coordinate deliveries in addition to established quotas, draft closing down protocols and others (see "Turgovski Dogovori na NRB" [Commercial Treaties of the Bulgarian People's Republic], vol IV, BTP, Sofia, 1972, pp 62, 72, 80, 91 and 95).

41. "Mezhdunarodni Sotsialisticheski Stopanski Obedineniya--Problemi, Perspektivi" [International Socialist Economic Associations--Problems, Prospects], Varna, 1977, pp 44-45.

42. V. Vorotnikov and A. Belyayev, op cit, p 210; Zh. Aroyo, "Razshirenoto Vuzproizvodstvo na NR Bulgariya" [Expanded Reproduction in the Bulgarian People's Republic], Sofia, 1977, pp 490-491.

43. Such complexes include capacities for the production bearings (together with the Organization for Cooperation in the Bearings Industry) and capacities for the production of the unified computer system (with the Intergovernmental Commission for Cooperation Among Socialist Countries in the Field of Computers).

44. Thus, for example, in 1966 the national economic organizations for civil aviation of Bulgaria, Hungary, the GDR, Poland, Romania and Czechoslovakia organized a pool for the operation of airlines. It is headed by a conference of their trade and financial managers and is serviced by a permanent group in charge of accounting, analysis and administrative support; in 1976 an international service was set up for the repair of large petrochemical installations, using brigades from Bulgaria, the GDR, Czechoslovakia, Poland and Hungary; the work of the two branches of the enterprise for heavy investment machine building, built by Bulgaria and Romania in the areas of Ruse and Giurgiu will be coordinated by a council of representatives whose work organ will be a committee of directors; a directors' council coordinates the joint operation of the Varna-Ilichevsk ferry boat system; in 1974 a Bulgarian-Soviet coordination bureau was set up for the utilization and application of automated control systems in Bulgaria, and so on.

45. Soviet economist Yu. Shiryayev has quite aptly described these organizations as "a kind of laboratory for international economic management," and has emphasized their pioneering nature (see Yu. Shiryayev, op cit, pp 71-72).

46. At their 32d session (1978) the CEMA-member countries decided, as a rule, that recommendations on the creation of new multilateral international economic organizations will be submitted by the CEMA session on the suggestion of its Executive Committee.

47. CEMA approved the following more important documents on the activities of international economic organizations: Agreement on the Legal Status and Privileges of International Sectorial Organizations for Economic Cooperation, 1966; Comprehensive Program for the Further Intensification and Advancement of Cooperation and Development of Socialist Economic Integration Among CEMA-Member Countries, 1971; Organizational-Methodical, Economic, and Legal Foundations of Scientific and Technical Cooperation Among CEMA-Member Countries and of Activities of CEMA Organs in This Area, 1972; Model Regulations on Conditions Settling Activities of International Economic Organizations of CEMA-Member Countries, 1973; Model Regulations on Financing and Payment by International Organizations of Interested CEMA-Member Countries, 1975; Coordinated (Uniform) Regulations Governing the Establishing and Operating of International Economic Organizations, 1976; and a Set of Measures on the Further Advancement of Cooperation Among CEMA-Member Countries and CEMA Activities, 1978.

48. In accordance with the stipulations of the Comprehensive Program (Section 16) agreements (protocols) were concluded between CEMA and the international economic organizations, regulating the basic aspects of their reciprocal cooperation. The international economic organizations were organized as specialized CEMA organizations (see the Complex Program, Sofia, 1971, p 130). This problem is regulated also through the CEMA charter. In accordance with the supplements made at the 33d session (1979), the international economic organizations of member countries established contractual relations with CEMA which coordinates their activities on the basis of concluded agreements.

49. See the Complex Program, Section 16, Point 4; "SEV--Osnovnyye Pravovyye Problemy" [CEMA --Basic Legal Problems], Moscow, 1975, p 56.

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CEMA COUNTRIES FACE PROBLEMS IN EXPLOITING MINERAL RESOURCES

Sofia MEZHDUNARODNI OTNOSHENIYA in Bulgarian No 6, 1980 pp 53-64

[Article by Petko Pavlov: "Problems of Development and Improvement of the Mineral-Raw Material Complex of CEMA-Member Countries"]

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Together with the fuel-energy complexes, the mineral-raw material ones[1] are the foundation on which the various "floors" of the processing industry of CEMA-member countries are erected. Their operation is characterized, on the one hand, by complex intrasectorial and intersectorial relations within the framework of the national economic complexes of the individual countries and, on the other, the intensification of ties and reciprocally complementary nature of the mineral-raw material complexes of the individual socialist CEMA-member countries.

The mineral-raw material complex of CEMA-member countries must be considered not as the simple sum total of national mineral-raw material complexes but as functionally interrelated complexes operating like a developing single production complex.[2]

Before the socialist revolutions most CEMA-member countries had a poorly developed industry. This included the production of mineral raw materials (ferrous metallurgy, nonferrous metallurgy and chemical industry). The creation and the development of a contemporary metallurgical and chemical industry and the establishment of the national mineral-raw material complexes of CEMA-member countries took place mainly after the socialist revolutions under the conditions of the international socialist division of labor.

The international socialist division of labor, USSR help above all, has been of great significance throughout the stages of the creation, development and functioning of the national mineral-raw material complexes--geological surveys and meeting the needs for raw material, scientific research and design (development of technologies, cadre training, etc.), procuring equipment, mastering the production process, marketing, etc.

Today the CEMA-member countries have a highly developed mineral-raw material complex capable of meeting virtually all the needs of our comity for the mineral raw and other materials it needs.[3]

In 1978 the CEMA-member countries produced the following: iron ore (marketable), 248,113,000 tons; cast iron and blast furnace ferroalloys, 146,426,000 tons; steel, 211,431,000 tons; rolled ferrous metals, 152,653,000 tons; sulfuric acid, 31,403,000 tons; synthetic ammonia, 22,931,000 tons; and plastics and synthetic resins, 5,968,000 tons. The share of CEMA in world output has been rising as follows: steel: from 24.9 percent in 1960 to 30.6 percent in 1978; sulfuric acid: respectively, from 15.9 to 27.2 percent; chemical fertilizers (in terms of useful substance): from 21.7 to 37.3 percent; plastics and synthetic resins, from 7.8 to 13.2 percent, and so on.[4]

The CEMA-member countries have at their disposal virtually all types of mineral raw materials. In terms of proven reserves they hold a leading position in the world. Their territories account for over four-fifths of the world's reserves of manganese ores and apatites; two-thirds of the nickel, tungsten and asbestos; about 50 percent of the world's iron ore, zinc and copper deposits; over 60 percent of sulfur-containing raw materials; about 25 percent of all potassium salts, and others.

The proven reserves of mineral raw materials in the socialist CEMA-member countries are essentially sufficient to meet the current and future needs. However, these resources are distributed very unevenly. Poland has copper and zinc ore deposits, sodium chloride and sulfur; the GDR has potassium salts; Bulgaria has polymetal and manganese ores; Hungary has bauxites (second largest deposit in the world); Vietnam is among the leading countries in the world in apatite deposits; Czechoslovakia has considerable deposits of magnesite and manganese ores; Mongolia, Cuba and Vietnam have some deposits of tungsten, lead, tin, zinc, cobalt, nickel, molybdenum and gold. In other words, the individual CEMA-member countries have individual types of mineral raw materials. The USSR alone has a virtually complete set of mineral raw materials within our comity.

The European CEMA-member countries (excluding the USSR) have shown a trend toward increasing their imports of mineral raw materials. Thus, for example, between 1960 and 1977 the share of iron ore imports rose from 0 to 61 percent in the area, from 80 to 90 percent in Hungary, from 83 to 98 percent in Poland, from 40 to 92 percent in Rumania, and 80 to 95 percent in Czechoslovakia.[5]

The USSR is the main supplier of mineral raw materials to the European CEMA-member countries. This determines the trend of increased exports of such raw materials by the USSR, which creates a number of difficulties. Procurement of additional amounts of raw materials exported to the European CEMA-member countries involves the solution of many problems. The solution is complicated by the high capital- and asset-intensiveness of the output in mineral-raw material sectors compared with the processing industry, and the shortage of investment funds in our countries. Such problems are being resolved mainly on the basis of the intensified cooperation among the countries in the field of investments, including the joint construction (on a bilateral and multilateral basis) of enterprises for the production and transportation of mineral raw materials.

Cooperation in the field of joint construction of enterprises and installations for the production and transportation of mineral raw materials is an important factor in the development and functioning of the mineral-raw material complex of CEMA-member countries. This cooperation offers the following advantages: a. It meets the needs of the individual CEMA-member countries for scarce raw materials; b. It takes into consideration national differences in production conditions and the quality of raw materials as a prerequisite for upgrading the effectiveness of the mineral-raw material complex of all CEMA-member countries.

We must emphasize, however, that in the past and, particularly, today (following the energy crisis which broke out in the capitalist countries), the significance of the conditions governing the extraction and quality of raw materials with a view to the development of a priority basis of the more effective resources of mineral raw materials, regardless of their location, has been insufficiently appreciated.

In recent years both economic publications and the CEMA organs have considered as the basic direction for the solution of the raw material problem by the individual CEMA-member countries the use of national resources. Comparative studies have been made of the level of development of mineral-raw material sectors by individual country, the percentage of workers employed in such sectors, and so on. However, such studies are not always correlated with studies of available deposits of corresponding raw materials and their quality, and may lead to evaluations according to which an individual country does not make sufficient use of local raw materials even though it may have reserves of such materials or their quality may be such as to make their extraction unproductive. The overestimating of the "utilization of domestic resources" or "self-satisfaction" factor[6] may bring about the unjustified increase of capital, asset and labor intensiveness in the production of mineral raw materials by the individual CEMA-member countries. This may adversely affect the effectiveness of the economy not only of the individual countries but of the entire comity.

For this reason, the solution of problems of development of the mineral-raw material complex and its territorial deployment must be based not only on balance considerations but on the reflection which one or another alternative may have on the economic effectiveness of the individual country and the entire comity.

The problem of transporting the necessary mineral raw materials from the USSR to the other CEMA-member countries is also of major importance in the normal functioning of the mineral-raw material complex of CEMA-member countries.

The faster pace of increase of amounts hauled, compared with the development of the transportation system in our countries, makes exceptionally urgent the solution of problems of the handling capacity of the transportation arteries in general, including those used for hauling mineral raw materials.

The difficulties involved in reciprocal hauling are the result not only of the large and steadily rising volumes but of the discoordination of the flows as well. Over 90 percent of the reciprocal foreign trade hauling (by weight) among CEMA-member countries are exports of goods from the USSR to the other CEMA-member countries and only 10 percent are USSR imports from such countries.[7] Mineral raw materials account for the bulk of such freight.

The problems of the transportation of mineral raw materials are of major importance in the development and effectiveness of the mineral-raw material complex of CEMA-member countries also because of the high share of transport expenditures in the cost of mineral raw materials. Such expenditures are particularly high in the transportation of relatively unprocessed raw materials. Thus, for example, the ratio between transport expenditures and the foreign trade price of iron ore changes, based on distance, as follows (in percentages): 500 km, 53.0; 1,000 km, 95.8; 2,000 km, 187; 3,000 km, 282; 4,000 km, 386 percent, and so on.[8]

The problems related to the transportation of mineral raw materials must be resolved not only through the development and improvement of transport relations but through the improvement of the mineral-raw material complex of the CEMA-member countries as well, taking the transport factor into consideration: improving the territorial location of enterprises consuming mineral raw materials; bringing material and energy-intensive production facilities closer to the sources of raw materials and energy; raising the level of processing of transport and raw materials, and so on.

The present condition of the mineral-raw material complex of CEMA-member countries is characterized by relatively intensive ties for supplying the national complexes with energy and raw material but also by relatively underdeveloped intrasectorial specialization and cooperation.

Thus, for example, the trade indicator for rolled ferrous metals--an indicator which characterizes the intrasectorial varietal specialization in the production of rolled metal goods--the CEMA-member countries are considerably behind the European Economic Community.

Reciprocal trade in rolled ferrous metals (varietal trade) among CEMA-member countries has varied from year to year, as follows (in percent of output): 1960, 4.4; 1965, 4.1; 1970, 5.6; 1975, 7.01; 1978, 7.84 percent; within these figures the volume of rolled metal goods exchanged within CEMA exclusively has been, respectively, the following: 1960, 1.5; 1965, 3.0; 1970, 2.3; 1975, 2.25; and 1978, 2.11 percent.[9] The same average indicator for the members of the European Economic Community was as follows: 1960, 14.5; 1965, 16.9; 1970, 22.8; 1975, 28.9; and 1978, 31.6 percent. In the case of The Netherlands, it was as follows: 1960, 68.4; 1965, 80.0; 1970, 78.8; 1975, 63.7; and 1978, 78.2 percent.[10]

The insufficient intrasectorial specialization found, in particular, among the smaller CEMA-member countries is a major restricting factor in the application of the achievements of scientific and technical progress in mineral-raw material sectors, improving the production process, upgrading its effectiveness, and resolving a number of intrasectorial problems such as lowering material intensiveness, increasing labor productivity and the quality of the goods produced by the consuming sectors, lowering material intensiveness and increasing the effectiveness of trade in mineral raw materials with third countries, and so on.

The groundless general development of mineral-raw material complexes prevents (with the exception of the USSR) the solution of major problems of scientific and technical progress in mineral-raw material sectors such as broadening the variety and upgrading the quality of output, production concentration and the development of optimal production capacities.

Upgrading the quality and increasing the number of used raw and other materials and their differentiation in terms of chemical structure, physical-mechanical and other characteristics, shapes and dimensions, is a major line in technical progress. For example, whereas in the 19th century several dozen types of carbon steels were used, today their number ranges in the thousands. The number of aluminum alloys and of the various types and modifications of plastic materials is rising. The process of differentiation of construction materials in terms of size is no less intensive. Some big metallurgical companies in the developed capitalist countries accept orders based on catalogs offering 6,000 to 10,000 different items. In the USSR rolled metal varieties include over 3,000 different sizes made of over 850 different brands of steel.[11]

The other socialist countries as well have achieved some successes in expanding varieties of ferrous metals (and of other types of mineral raw materials) in accordance with the demands of technical progress in consumer sectors. However, the possibilities of the smaller CEMA-member countries are far more restricted compared with the technically developed capitalist countries and the USSR.

On the other hand, the development of scientific and technical progress in recent decades has led to a concentration of production and to increasing the capacity of metallurgical, chemical and other enterprises producing mineral raw and other materials, as well as the capacity of individual machine units. Thus, for example, in the 1950s-1960s, in ferrous metallurgy 3 to 4 million tons of steel per year was considered optimum capacity; today it has been raised to 8-10 million tons.[12]

Individual capacities of machine units have been rising as well. By the end of 1974 the metallurgical plant in Krivoy Rog in the USSR commissioned blast furnace no 9. The furnace has a working surface of 5,000 cubic meters and a productivity of 4 million tons of cast iron per year. According to the design, the labor productivity at this furnace will be 30 percent higher compared with the production of cast iron 2,700 cubic meter furnaces, while production costs and capital intensiveness will be reduced, respectively, by 2 percent and 12 percent. A trend toward increasing the unit capacity of facilities is noted in other types of metallurgical production as well: the nominal capacity of a converter has reached 350 tons;the capacity of electric furnaces has reached 365 tons. The productivity of the new thick sheet machine tools produced in recent years varies from 1.8 to 2.0 million tons per year; that of continuous wide band machine tools is 6 to 8 million tons per year, and so on.[13]

Production concentration, including the increased unit capacity of metallurgical machinery and their specialization insure higher labor productivity and reduced outlays per unit of metallurgical output. For example, labor productivity per worker in basic shops of metallurgical plants in the USSR (where production concentration is higher) is higher than that in other CEMA-member countries as follows: cast iron production, from 34 percent to a factor of 10; coke, from 43 percent to a factor of 5; Martin steel, from 24 percent to a factor of 4; rolled metals, from 29 percent to a factor of 3.5, and so on.

Similar changes have been noted in nonferrous metallurgy and the chemical industry. Thus, for example, as production capacities of some chemical enterprises rise their economic indicators have been changing as follows: with a

production capacity for 50,000 tons of sulfuric acid per year relative capital investments equal $20 per ton; for 250,000 tons, $9.3; for 500,000 tons, $7.2 per ton; production costs have been, respectively, $12.0, $9.89 and $9.68 per ton; polyvinylchloride: for a 6,000-ton annual production capacity relative capital investments have equaled $285 per ton; for 20,000 tons, $170; for 40,000 tons $129; production outlays have been, respectively, $290, $250, and $230 per ton, and so on.[14]

However, the output of some modern large plants and high-capacity machines, with a relatively narrow specialization, exceeds the needs of the country for such items; on the other hand, it restricts the possibilities of the individual countries (smaller ones in particular) of expanding the variety of raw and other materials produced in accordance with the requirements of the consuming sectors: differentiations based on chemical structure, physical-mechanical and other properties, size, shape, and so on.

The contradiction between the requirements of consuming sectors (increasing the variety of raw and other materials used) and the trend toward increasing and narrowing the specialization of individual capacities could be resolved only through the intensification of international production specialization and cooperation in the mineral-raw material sectors: specialization of the national mineral-raw material complexes and limiting the groundless duplication in the varietal structure of the production process and increasing their complementary nature not only in terms of raw material and fuel supplies but in the production of semi-finished and finished goods as well. In other words, the problems of production concentration and of expanding the variety of raw and other materials produced in accordance with the requirements of technical progress may be successfully resolved not on the level of the individual country within CEMA (excluding the USSR) but on the level of the comity as a whole.

The development and improvement of the mineral-raw material complex of the CEMA-member countries is an important prerequisite in upgrading the effectiveness not only of the mineral-raw material complex iteslf but of the national economic and other industrial complexes of CEMA-member countries.

The specialization of the national mineral-raw material complexes, the elimination of unecessary duplication, and their complementary nature within the developing single production complex are major prerequisites for the improvement of the individual national economic complexes. Specialization provides the opportunity for the more proper deployment of the territorial mineral-raw material sectors in the individual CEMA-member countries in resolving problems of their economic development, taking into consideration not only the balanced requirements but the effectiveness of the production process, the strong ties between these sectors and natural resources and the influence on the economic effectiveness of geographic and mining and geological conditions such as the depth of the mineral deposits, the size and configuration of productive strata, the content of useful and harmful components and others.

The improvement of the individual national economic complexes of CEMA-member countries, with a view to their satisfaction with mineral resources, calls for a solution not only of problems of specialization and territorial deployment of production facilities using mineral raw materials but problems of specialization

and territorial deployment of material-intensive sectors and subsectors of the processing industry which, as a matter of principle, should come closer to a source of raw and other materials.

The role of production intensification in the mineral-raw material complex (including varietal increases and quality improvements of output) is determined by the increased significance of such measures in reducing material intensiveness and increasing production effectiveness.[15]

However, regardless of the successes achieved in the improvement of the structure and in upgrading the quality of produced mineral raw materials, including construction materials, the CEMA-member countries have fallen behind the requirements of contemporary technical progress and of the achievements of technically highly developed capitalist countries. This adversely affects the material intensiveness and effectiveness of output in machine building and in other sectors consuming mineral raw materials.

The CEMA-member countries are falling behind the technically developed capitalist countries in the production of sheet steel. Our countries have insufficiently developed the production and, correspondingly, the consumption of higher quality metals (heat processed rolled metals, rolled metals with plastic and aluminum lining, low-alloyed steel, shaped and bent items, and so on), whose use provides from 5 to 25 percent metal savings.[16]

Another factor adversely affecting production metal intensiveness and effectiveness in the machine-building complex is the high share of utilization of steel and iron castings rather than pressed and stamped parts made of steel sheets.[17]

The use of steel sheets rather than castings brings about progressive changes in metal processing methods, for in this case plastic deformation methods are used. This reduces metal wastes by an average of some 30-40 percent and the metal utilization coefficient reaches 80-90 percent. Furthermore, the processing of the metal through plastic deformation increases the tensile strength and hardness of parts and items. The use of steel sheets instead of steel castings increases finished goods resources by more than one-half and considerably reduces the metal intensiveness of output.[18]

The insufficient specialization of the national production complexes and the unjustified duplication prevent our countries from mastering the production of a number of highly effective (frequently low-volume) expensive types of raw materials, semifinished goods and materials which we are forced to import from the developed capitalist countries. This adversely affects the material intensiveness of the trade in mineral raw materials and materials between our countries and the developed capitalist countries.[19]

The study of the development, current condition and functioning of the mineral-raw material complex of CEMA-member countries leads to a number of conclusions:

First, the development of the mineral-raw material complexes of the CEMA-member countries has been, so far, essentially extensive. The problems of the development and application of the achievements of scientific and technical progress in mineral-raw material sectors and, correspondingly, problems of upgrading the effectiveness

of the production and consumption of mineral raw materials are being resolved inadequately. We have outstripped the technically developed capitalist countries in the production of a number of mineral raw materials (coal, steel, and so on). At the same time, however, we have fallen behind in the development of sectors consuming mineral raw materials.

Second, the insufficient intrasectorial specialization of mineral-raw material sectors (particularly in the smaller CEMA-member countries) hinders the solution of the problems of production concentration and the creation of optimal capacities. This adversely affects the production effectiveness of these sectors in the individual countries and in the entire comity. This also hinders the replacement of morally obsolete equipment and technologies and the modernization and technical enhancement of the production process.

Third, the general production process and insufficient specialization of the national mineral-raw material complexes within the single complex of CEMA-member countries has left these countries behind in the production and consumption of a number of effective types of mineral raw and other materials. This is one of the important reasons for the increased outlays of raw materials and materials per unit of output and of expenditures for the maintenance and repair of productive capital and consumer goods produced by our countries compared with technically advanced capitalist countries.

Fourth, the insufficient intrasectorial specialization within the mineral-raw material sectors in our countries and the lagging in the development of the production of a number of effective types of raw and other materials have also affected the nature and material intensiveness of trade in mineral raw materials between CEMA-member countries and developed capitalist countries. We are not exporters of mineral raw materials (we export less expensive ferrous metals, nonferrous metals, and chemical semifinished goods and materials), while importing science-intensive goods (metallurgical and chemical goods whose cost is higher by several fold). This fact hinders the solution of the raw material problem and increases the shortage of a number of mineral raw materials in the individual countries and in the comity as a whole. It worsens the effectiveness of our foreign economic relations with developed capitalist countries.

The development and improvement of the mineral-raw material complex has largely been and will continue to be determined by the intensification of integration processes in our comity. The adoption of the long-term target cooperation program (DTsPS) which will meet the economically substantiated needs of CEMA-member countries for energy, fuel and raw materials (the sub-program for industrial raw materials) is a major stage in this direction. In its present state, however, it not only fails to resolve but even to raise a number of major problems of the development and advancement of the mineral-raw material complex of CEMA-member countries. It formulates and resolves essentially, in their basic lines, problems of their extensive development rather than of production specialization and intensification.

The problems related to the future development of the mineral-raw material complex of CEMA-member countries must be resolved by improving both the DTsPS and the other forms of cooperation in this area.

The formulation of joint intersectorial multiple-variant forecasts is an important aspect in improving the forms of cooperation among the mineral-raw material sectors. This will enable us to accomplish the following: coordinate sectorial and scientific-technical forecasts in the mineral-raw material sectors within a single interrelated system; elaborate and analyze the various alternatives for the development of the mineral-raw material complex of CEMA-member countries (alternatives for combining extensive with intensive development of the complex, specialization of the individual mineral-material complexes within the framework of the overall complex and others), prepare the formulation of systems of accountability, forecasting and planned balances of basic mineral raw materials within CEMA, analyze the comparative effectiveness of the separate variants for development of the mineral-raw material complex of CEMA-member countries and others.[20]

In the future, the following will be necessary in order to improve production and consumption and to reduce outlays of mineral raw materials per unit of output:

1. A study of all utilization stages (turnover) of mineral raw materials, and the determination of the importance of the individual stages from the viewpoint of their influence on economic effectiveness, bearing in mind that the losses incurred by the national economy as a result of overexpenditures of mineral raw materials rises with the extent of their processing.

2. The elaboration of comprehensive intercoordinated programs for the lowering of production material and energy intensiveness. The lack of such programs may result in savings at one stage at the expense of overexpenditures at subsequent stages in the utilization of raw materials or the conservation of some resources at the expense of overexpenditures of others.

The solution of these problems may be helped by converting the DTsPS (the industrial raw materials sub-program) from a sum total of individual and frequently non-interrelated multilateral or bilateral agreements on the production and reciprocal deliveries of mineral raw materials needed for the compensation of one or another shortage into a factual program-targets document and to a base for the making of economically substantiated decisions.

The problems related to the development and improvement of the mineral-raw material complex of CEMA-member countries may be arbitrarily divided into two main groups: a. problems related to its extensive development; b. problems of its intensive development.

Let us indicate in the first group of problems the following more important directions:

First, intensification of cooperation in geological surveys for increasing geological and industrial reserves of mineral raw materials, including underwater areas.

Second, the development and improvement of cooperation methods in the extracting industry. This includes the joint construction of capacities for the production and transportation of mineral raw materials on the territories of CEMA-member countries (mainly the USSR) which have more advantageous resources. A number of problems must be resolved in this area related to the economic conditions for cooperation (marketable content and recomputation of credits, determination of project costs, share

of participation, amount of related capital investments and so on), the choice of methods, the determination of the economic effectiveness of joint construction projects and others.

Third, raising the level of processing of mineral raw materials produced and transported, including the development of technological specialization wherever expedient. For example, the joint construction in the USSR of a big metallurgical plant with the capacity for 10 million tons of cast steel ingots would make it possible for the interested CEMA-member countries which have no domestic raw materials for the production of ferrous metals to build only metal hauling capacities instead of metallurgical plants involving the full metallurgical cycle, and transport cast ingots instead of the three tons of iron ore coking coal needed to produce one ton of steel ingots.

Fourth, taking power- and material-intensive production facilities closer to the sources of energy and raw materials. This should be accomplished in the mineral-raw material sector and in the processing industry. For example, in the case of joint international cooperation in the field of metal-intensive machine building, we must take into consideration the availability of the necessary types of metal and the conditions for their production.

Fifth, the methods of cooperation between CEMA-member countries and developing countries must be improved with a view to more extensive utilization of the latter's mineral-raw material resources, and so on.

The intensification of production and consumption and the lowering of outlays and materials per unit of output are major factors in the development and improvement of the mineral-raw material complex of CEMA-member countries.

Currently these factors are becoming more important as a result of the contradiction between the increased needs for mineral raw materials and the limited possibilities for their production. This is a contradiction which, regardless of the successes in the field of technical progress achieved in the extracting industry, will be intensified in the future. It is related not only to the presence of mineral raw materials in the ground and the technical possibilities for their utilization but, above all, to the economic possibilities of society to procure the necessary material, labor, financial, foreign exchange and other resources for the geological surveys, extraction and transportation of ever growing amounts of mineral raw materials. In the future the solution of these problems will be complicated not only by the increased scale but by the need for the utilization of resources extracted under more adverse geographic and geological conditions. This will increase the capital, material and labor intensiveness of the produced mineral raw materials. A number of problems are related to transportation, environmental protection and the nonrecoverable nature of mineral raw materials.

For this reason the lowering of material intensiveness per unit of output is not only a sectorial problem but one of the factors for upgrading the effectiveness of the processing industry and for accelerating the economic development of the individual CEMA-member countries and of the entire comity.

The intensification of the production and consumption of mineral raw materials raises complex scientific, technical and production problems and requires a tremendous

scientific potential and material, manpower, financial and foreign currency resources. The solution of these problems is possible only on the basis of the intensification of integration relations and specialization of the individual national mineral raw material complexes which must be made mutually complementary, and become parts of the single CEMA mineral-raw material complex.

The USSR plays a leading role in the solution of intensification problems which are considerably more complex than those of extensive development. This is based on the position held by the USSR mineral-raw material complex within the developing single complex of CEMA-member countries. The Soviet Union has a large scientific and scientific and technical potential and extensive natural, material, manpower and financial resources. This enables it to develop mineral-raw material sectors on a scale which can satisfy not only its domestic needs but a considerable share of the needs of the other CEMA-member countries. These countries are thus spared the need to develop entire complexes and can specialize in the production of individual types of metallurgical or chemical goods by concentrating production facilities and developing optimal capacities. In turn, the intrasectorial technological and varietal specialization of the national mineral-raw material complexes will make it possible to raise their technical standards and to increase the comprehensiveness of the single mineral-raw material complex of CEMA-member countries.

Let us indicate the following more important among the exceptionally broad range of problems related to the intensive development of the mineral-raw material complex of CEMA-member countries:

First, the intensification (based on measures included in the DTsPS) of scientific and technical cooperation for the solution of basic scientific and technical problems of production intensification in mineral-raw material sectors: development of new and progressive types of equipment, including computerized and automated control lines; development of technology for continuous processes in the chemical and metallurgical industries; the production of pure and superpure metals and chemicals with predetermined indicators and others.

Second, the enhancement of the technical standard of output in mineral-raw material sectors: the organization of the old metallurgical and chemical plants which are behind the contemporary requirements of technical progress in terms of production outlays per unit of output and quality; production concentration and the creation of optimal capacities; the replacement of morally and physically obsolete machines and equipment, which is an indicator in which our countries are considerably behind the technically developed capitalist countries.

Third, raising the quotient of utilization of useful components in mineral raw materials and of secondary raw and other materials. The organization of waste-free production in the metallurgical and chemical industries is a problem to be resolved in the future. At the present time, however, extensive possibilities exist within these sectors for reducing processing losses. This would enable us relatively to reduce the volume of prime raw materials extracted.

Fourth, the use of more effective mineral raw materials and materials instead of traditional ones. This would enable us to broaden the mineral-raw material base and to lower outlays of raw and other materials per unit of output.

Fifth, the broadening of variety and the qualitative improvement of the mineral raw materials and materials produced and consumed. This is a prerequisite for the lowering of material intensiveness and for upgrading production effectiveness in consuming sectors and for reducing material intensiveness in trade in mineral raw and other materials involving third countries.

The intensification of integration processes, which includes the elimination of unjustified duplication, development of intrasectorial varietal and technological specialization in mineral-raw material sectors and the establishment of a single mineral-raw material complex within CEMA are important factors in resolving problems related to the development and improvement of the mineral-raw material complexes of CEMA-member countries.

FOOTNOTES

1. We have included in the mineral-raw material complexes some of the stages in the processing of mineral raw materials. We have taken as a single entity production-economic complexes such as ferrous metallurgy, nonferrous metallurgy, the chemical industry and others.

2. This article will consider mainly problems of intensification of scientific and technical, production and other relations among the national mineral-raw material complexes of CEMA-member countries and their reciprocally complementary nature as major prerequisites leading to the creation of a single production complex within CEMA. Problems of the management, incentive or other mechanisms of the developing single mineral-raw material complex must be studied separately and will not be considered in this article.

3. In 1977 the CEMA-member countries met their import requirements through reciprocal deliveries as follows: cast iron, 94.8 percent; iron ore, 74.4 percent; nonferrous metals, 71 percent (including 87.4 percent aluminum and 81.1 percent copper), and so on.

4. "Statisticheskiy Yezhegodnik Stran-Chlenov SEV, 1979" [Statistical Yearbook of CEMA-Member Countries for 1979]. Statistika, Moscow, 1979, pp 76-77, 90-126; "On the 30th Anniversary of the Founding of CEMA, the National Economy of CEMA-Member Countries," "Statisticheskiy Sbornik" [Statistical Collection], Moscow, 1979, p 91.

5. Ye. A. Vorob'yev and B. A. Kheyfets, "Otraslevaya Struktura Khozyaystva Stran SEV i Nauchno-Tekhnicheskiy Progress" [The Sectorial Structure the Economy of CEMA-Member Countries and Scientific and Technical Progress]. Nauka, Moscow, 1979, p 98.

6. This is largely begun (and supported) by the leaps in the price increases of some mineral raw materials on the international capitalist market after 1974 and and their "transfer" through the price-setting system to relations among CEMA-member countries.

7. V. Shnina, "Problems of Rationalization of Transport and Economic Relations Among CEMA-Member Countries," VOPROSY EKONOMIKI, no 10, 1974, p 85.

8. "Toplivno-Syr'yevaya Problema v Usloviyakh Sotsialisticheskoy Ekonomicheskoy Integratsii" [The Fuel-Raw Material Problem in the Conditions of Socialist Economic Integration]. I. R. Zubkov, editor in charge. Nauka, Moscow, 1979, p 86.

9. According to some forecasts, the percentage of the varietal exchange of rolled ferrous metals among CEMA-member countries will not only retain its low level but will even be lowered by 1990 and the year 2000.

10. "Quarterly Statistical Bulletin of European Ferrous Metallurgy," United Nations, New York, 1962-1979; "Statistical Yearbook of CEMA-Member Countries," and others.

11. D. I. Popov, "Povysheniye Effektivnosti Metallurgicheskogo Proizvodstva" [Upgrading Metallurgical Production Effectiveness], Metallurgiya, Moscow, 1972, p 39.

12. The problem of the development of so-called miniplants in ferrous metallurgy deserves our attention in the study of the concentration of production in ferrous metallurgy and its influence on the effectiveness of metallurgical output. Without undertaking the particular study of this problem, let us note that in this case the question is not one of choosing between big or small plants but of a certain combination of production facilities in large plants and in the so-called miniplants essentially in the solution of some regional and other specific problems (see A. F. Myrtsimov, "New Equipment at Ferrous Metallurgy Miniplants," SShA--EKONOMIKA, POLITIKA, IDEOLOGIYA, no 1, 1979, pp 87-97.

13. P. Pavlov, "Surovinno-Energiynite Resursi i Ikonomicheskata Integratsiya" [Raw Material-Energy Resources and Economic Integration], Varna, 1978, pp 118-119.

14. "Proizvodstvennyye Moshchnosti v Promyshlennosti Glavnykh Kapitalisticheskikh Stran" [Production Capacity in the Industry of the Main Capitalist Countries]. Nauka, Moscow, 1978, p 258.

15. The substitution of shaped high-precision parts, not requiring machine processing, for hot-rolled metal parts which do require such processing in some machine building sectors could reduce metal outlays by 15-30 percent; labor productivity in machine building would increase by a factor of 5-14 while production costs would be reduced by a factor of 2-4 (V. V. Lempitskiy et al., "Progressivnyye Sposoby Povysheniya Kachestva Stali" [Progressive Methods for Upgrading Steel Quality]. Metallurgiya, Moscow, 1978, p 126.

16 VOPROSY EKONOMIKI, no 7, 1979, p 43.

17. In 1978 the USSR produced 6 million tons of steel castings using 10 million tons of steel, whereas the United States used 2.2 million tons and Japan, 740,000 tons of steel for the production of steel castings (VOPROSY EKONOMIKI, no 7, 1979, p 42).

18. I. G. Pashko, "Problemy Snizheniya Metalloyemkosti" [Problems of Reducing Metal Intensiveness]. Metallurgiya, Moscow, 1977, p 159.

19. In 1978 the ratio between the price of one ton of rolled ferrous metal imported from the developed capitalist countries and the price of one ton exported by the same countries averaged, for the European CEMA-member countries, excluding Romania for which no data are available (the price of one ton of exported raw ferrous metal = 1), was 1.6. The indicator showed substantial disparities among the various types of raw metal: it was 1.7 for wire rods, 2.0 for steel sheets, 2.5 for cold rolled strips, and so on. Major disparaties were noted among the individual CEMA-member countries as well: the ratio was 2.04 for Bulgaria, 2.8 for Hungary, 1.8 for the GDR, 3.1 for Poland, 1.4 for the USSR and 2.2 for Czechoslovakia. The ratio between the price per ton of rolled nonferrous metal imported from the developed capitalist countries and the price per ton exported to the same countries equaled, on an average, for the European CEMA-member countries, 1.8 (including rolled copper, 1.8; aluminum, 1.6; and zinc, 2.3); the indicator was 4.2 for Bulgaria, 1.8 for Hungary, 3.0 for the GDR, 2.2 for Poland and 0.97 for the USSR. The respective price ratio for some chemicals was as follows: plastics and synthetic resins, averaged for the European CEMA-member countries, 2.5 (including 2.45 for Bulgaria, 2.01 for Hungary, 1.87 for the GDR, 2.2 for Poland, 2.14 for the USSR and 3.7 for Czechoslovakia); it was 2.6 for antidust agricultural chemicals, 2.7 for synthetic rubber, and so on.

20. See P. Pavlov, "Problems of Joint Forecasting by the CEMA-Member Countries," in the collection "Teoreticheskiye i Metodologicheskiye Problemy Kompleksogo Sovershenstvovaniya Sotrudnichestva v Oblasti Planovoy Deyatel'nosti, SEV, MIEP MSS" [Theoretical and Methodological Problems of the Comprehensive Improvement of Cooperation in the Planning Activities of CEMA and MIEP MSS], 1977, Moscow, pp 172-180.

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ECONOMIC INTEGRATION SEEN AS KEY TO SOLVING CEMA ENERGY WOES

East Berlin DIE WIRTSCHAFT in German Vol 36 No 1, 15 Jan 81 p 29

/Article by Dr Vilen Karpitsch: "Fuel Problems in CEMA Countries"/

/Text/ The expansion of their fuel and energy bases is vital for the CEMA countries so that they may be able to reliably meet the growing need of their economies for raw materials, fuels and energy.

Their planned economies and close cooperation have largely protected the socialist countries from crises such as arose in the raw material and fuel economy of the capitalist world and still plague them. At the same time the situation in the capitalist sector of the world economy and on the international markets for raw materials and fuels has had some effect on the economies of the CEMA countries. The rational use of fuels is the basis for the settlement of the raw material problem in the 1980's. For the USSR, the main raw material supplier in CEMA, the consumption and export of raw materials and fuels is coupled with several problems. The first problem is location. Some 80 percent of Soviet industrial production come from the European regions of the USSR and the Urals. The consumption of raw materials, fuels and energy corresponds to that output. However, more than 90 percent of the resources of oil, natural gas, coal, water, timber and ores are located in the eastern parts of the country, which are sparsely inhabited, suffer from an extremely severe climate and are far removed from the main transport routes. An increase in raw material and fuel exports to the CEMA countries from the European part of the USSR would result in a deficit in these resources for industry in the central region of the Soviet Union, which could be counterbalanced only by deliveries of raw materials and fuels from the eastern regions. The enormous distances--3,000-4,000 km--drive up the cost of freight. In recent years the cost of transporting metals from the Kazakhstan region and Siberia, a distance of more than 4,500 km, amounted to R7-9 per ton. Freight costs for lumber from Bratsk (distance 5,800-7,000 km) amount to R19-22 per ton.

Second: Conditions for the production of raw materials and fuels have worsened significantly in the course of recent years. Each ton now calls for greater expenditure (the recovery of iron ore with less ferrous content, of oil from deeper strata; decline of output in the traditional regions, timber availability only in poorly accessible areas, and so on).

Third: The branches of extractive industry least developed in the east of the country are among those requiring the heaviest investment.

At the disposal of the CEMA countries is an efficient modern fuel and energy base. Its structure is changing for the better by the increasing use of advanced forms of energy. These countries share in world energy production rose from 21 percent in 1960 to 25 percent in 1979.

The satisfaction of energy needs requires major common efforts because, with the exception of the Soviet Union, the proportion of domestic energy in total energy consumption is gradually declining in all CEMA countries. In 1975 output within the community met 70 percent of total energy consumption in the CEMA countries (about 580 million tons of specific fuels, excluding the USSR). By the end of 1980 requirements are likely to have grown to about 780 million tons of specific fuels, and it will be possible to satisfy only 65 percent of these requirements from domestic sources. In 1990 the respective indices will probably be 1 billion tons and 50 percent.

In the course of the past 25 years the socialist fraternal countries increased consumption of energy and fuels proceeded largely thanks to deliveries from the Soviet Union, as emerges from the table at the end of this article. The enormous flow of energy raw materials from the USSR to the economies of the CEMA countries was an important factor in their industrial growth. In the period 1976-1980 the total volume of these deliveries amounted to about 800 million tons specific fuels. Among these supplies were about 350 million tons oil, 90 billion cubic meters natural gas, 67 billion kilowatt hours elecric energy (roughly 1.5 times the volume of the previous five-year plan period). In addition deliveries included 116 million tons of iron ore (clean metal). In the period 1981-1985 Soviet exports of energy raw materials will grow by another 20 percent. Oil supplies will be kept at the high level of 1980 and achieve almost 400 million tons in the five-year plan period.

Socialist economic integration is very effective in the settlement of energy problems in the widest sense. Integration reliably ensures that the needs of the partner countries are met on a long-term planned basis and preferential financial terms. The prices for energy in the CEMA countries exchange of goods do indeed base on world market prices, but they are free from cyclical and speculative influences and do not fluctuate in the course of the year. By this means sudden price hikes are avoided. The adjustment of the national economies to the constant trend toward changes in the price proportions at the international level is thus eased. In 1979, for example, the European socialist countries purchased oil from the Soviet Union at about 40 percent below world market prices. According to the estimates available, the total profit of the CEMA countries from purchases in the USSR of oil and oil products alone amounted to more than 4 million transferable rubles in the period 1976-1980.

Though the Soviet Union has tremendous energy raw material resources, increases in exports are approaching objective limits. Given the present criteria of the production and export of oil, gas and some other types of energy sources, we may no longer ignore the fact that these reserves are limited and irrecoverable.

The fraternal parties in the CEMA countries assign priority to the drafting of a strategy for the development of the fuel and energy complex. Here they take into consideration the price inflation with regard to energy raw materials and their limits as well as the impact of the world energy crisis.

It is the task of the CEMA countries to adapt to the new and less favorable situation in the fuel and energy sector.

The energy problem will now have to be tackled in conjunction with other industries, especially machine construction. In addition to the expansion of the national fuel and energy bases this will require coordinated measures for restructuring the various economies and rationalizing energy consumption.

In 1978 the 32d CEMA Meeting approved a long-range target program for cooperation on securing the vital needs of the CEMA countries for important types of energy, fuel and raw materials through 1990. It represents a coordinated strategy for solving the fuel and energy problem. This program no longer emphasizes the extensive expansion of production and reciprocal deliveries of fuel and energy. Instead it stresses the necessity more intensively to utilize these resources. The implementation of this program and other related long-range programs demonstrates the benefits of the socialist division of labor and the coordinated development of the structure of industry and the internal industry structure in various CEMA countries: A more rational siting of energy intensive and material intensive industries; the further development of traditional raw and fuel reserves; the speeded-up processing and utilization of new energy sources, especially nuclear energy; the expanded production of new materials; cooperation in the field of science, production and the use of resources including international concentration of investments. This strategy is directed to the greatest possible inclusion of national resources in the economic circulation, especially of solid fuels for the production of electric energy and energy use. The European CEMA countries enjoy substantial deposits of hard coal, brown coal and lignite, amounting to about 100 billion tons (plus estimated deposits in the amount of about 80 billion tons). This circumstance permits us significantly to expand the output of solid fuels and process them technologically into liquid gas or other more easily carried fuels.

The long-range target program is concerned especially with nuclear energy. In 1979 a multilateral treaty was signed, by which 50 major industrial enterprises and associations of the People's Republic of Bulgaria, the Hungarian People's Republic, the GDR, the People's Republic of Poland, the Socialist Republic of Romania, the USSR, the CSSR and the Socialist Federative Republic of Yugoslavia will participate in the production and delivery of complex equipment for nuclear power plants. In the past 10 years and with the aid of the USSR the construction of nuclear power plants with a total capacity of 37,000 megawatt was begun in the European CEMA countries and Cuba. This will allow annual savings of about 70 million tons specific fuels. In cooperation with interested partner countries two nuclear power plants of 4,000 megawatt capacity each are to be constructed on Soviet oil; half the subsequent output of electricity is to be exported to the fraternal countries.

As the result of common efforts by the interested countries powerful hydroelectric plants are to arise on the banks of the Danube: "Gabcikovo-Nagymaros" (Hungarian-Czechoslovak section), "Iron Gate II-Djerdap II" (Romanian-Yugoslav section); "Nikopol-Turnu-Magurele" (Bulgaro-Romanian section), and various other hydroelectric plants in the basins of the Danube and other rivers. Of great importance also is the construction of the pump storage stations Lakatnik (Hungarian People's Republic), Predikalossek (People's Republic of Poland), Nevistka and Djerdap III (Socialist Federative Republic of Yugoslavia).

Multilateral cooperation for the advanced splitting of oil on the basis of the most modern technologies occupies a very special place.

The CEMA countries still have extremely promising possibilities as regards conservation: So far 40 percent more fuels and energy are used to produce a comparable unit of the national product in the socialist community of nations than in the EEC countries. If the consumption standards of these resources were reduced to the level prevailing in the EEC countries, the national products of the CEMA countries could be raised by nearly 50 percent at the present volume of fuel output.

We should not that fuel conservation measures require only about half or even a third of the investments needed for the corresponding comparable rise in production, because it is not necessary to construct new shafts, brown coal mines, oil refineries, electric power plants and electricity lines. This aspect is fully taken into consideration by the CEMA long-range energy strategy. Envisaged is the development and introduction of new technical solutions as well as the perfection of existing technologies which will reduce the fuel and energy demand; the use of energy conserving technological processes; the improvement of thermal insulation; the improvement in the efficiency of energy using plant. Also implemented will be measures for the complete exploitation of fuel deposits as well as the more complete utilization of secondary energy.

The successful accomplishment of the task in hand largely depends on close international cooperation in the supply of fuel and energy producing industries with machines, plant and materials. In the first line this refers to the production of plant for mining, oil production, oil refining and the chemical industry, of energy as well as lifting and transport equipment. The long-range target program for machine construction provides for common solutions to all related technical problems. These include the development of production specialization and cooperation, the reconstruction and expansion of existing as well as the provision of new capacities, in part by the common efforts of the interested countries.

Table--USSR Raw Material and Fuel Deliveries to Other CEMA Countries

	1961/1965	1966/1970	1971/1975	1976/1980
Crude oil, million tons	59	138	250	370
Natural gas, billion cubic meters	1.6	8.0	30	88
Hard coal, million tons	63	62	74	--
Electric energy, billion kilowatt hours	3.5	14	40	64

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REPORT ON FULFILLMENT OF 1980 ECONOMIC PLAN

Sofia RABOTNICHESKO DELO in Bulgarian 30 Jan 81 pp 1-2

[Announcement of the Committee for the Unified System for Social Information of the Council of Ministers on the Implementation of the Unified Plan for the Socio-economic Development of the Bulgarian People's Republic in 1980]

[Text] In 1980, as a result of the expanded extensive political and organizational work of party, state and economic organs at all levels of social management and of the nationwide socialist competition, the labor collectives will welcome the 12th BCP Congress with new successes in the development of the Bulgarian People's Republic.

The national income generated in 1980 exceeded 20 billion leva. Compared with 1979 it rose 5.7 percent, thus meeting the increase stipulated in the plan. The virtually entire increase was the result of higher social labor productivity.

The economic complexes, ministries and departments fulfilled their annual plan for social labor productivity 102.0 percent; net output, 101.1 percent; profits, 105.3 percent; capital returns, 102.4 percent; and profitability, 105.2 percent. Above plan profits totaled 440 million leva. Profits per 100 leva productive capital averaged 14.82 leva or 0.73 leva above the 1980 planned figure; net output per 100 leva productive capital averaged 39.19 leva or 0.92 leva above the plan.

A high population employment level was achieved. The trend toward reducing the number of people engaged in material production while increasing those employed in the nonproduction area continued, mainly by increasing the number of people employed in education and consumer and health services to the population. The vocational-skill structure of the manpower improved. By the end of 1980 about 210 out of 1,000 workers and employees were specialists. Nearly one out of three workers and employees under 35 had higher, semihigher or secondary specialized training.

By the end of 1980 productive capital in the Bulgarian People's Republic rose to about 77 billion leva.

1. Industry

The volume of industrial output reached 28,578,000,000 leva (on the basis of manufacturer's prices of 1 January 1971), exceeding the 1979 figure by 1,130,000,000 leva. The growth rate of industrial output and of labor productivity by basic ministries and departments was as follows:

	1980 in percent of 1979	
	Overall Industrial Output	Labor Productivity
Ministry of Power Supply	109.6	100.4
Ministry of Chemical Industry	109.7	104.3
Ministry of Machine Building	104.5	103.0
Ministry of Electronics and Electrical Engineering	108.1	108.0
Ministry of Light Industry	104.5	104.0
National Agroindustrial Union	99.2	99.8
Ministry of Construction and Construction Materials	103.3	101.6
Ministry of Metallurgy and Mineral Resources	102.4	98.9
Ministry of Transport	106.4	106.1
Ministry of Forests and Forest Industry	104.3	104.7
Ministry of Internal Trade and Public Services	99.5	100.5

Labor productivity rose 2.6 percent and accounted for about 70 percent of the growth of output.

Qualitative changes continued to be made in the production structure of sectors determining technical progress and insuring power resources for the national economists. The production of electric and thermal power developed at a higher pace--108.6 percent; the fuel industry fulfilled its plan 105.6 percent; the chemical and rubber industry, 111.3 percent; and the machine building and metal processing industries (including electrical engineering and electronics), 106.3 percent.

The needs of the national economy for important raw and other materials, export commodities, and goods for the domestic market were satisfied better.

The achieved positive results insured the necessary funds for the self-financing of economic organizations and for raising the income of labor collectives.

Basic Industrial Goods Produ

	Measure	1980	1980 in % of 1979
Electric power	million kwhr	34835	107.3
Coal	thou. tons	31498	106.9
Rolled ferrous metals	" "	3215	102.8
Electric hoists	thousands	125	105.2
Forklift trucks	"	44	84.0
Gas operated lift trucks	"	22	101.7
Power transformers	"	8	112.7
Calcinated soda (98 percent)	thou. tons	1479	98.7
Nitrogen fertilizers (100 percent base, incl. carbamide)	" "	730	107.9
Chemical fibers and fabrics	" "	95	103.6
Plastics	" "	147	137.3
Paper	" "	316	100.9
Cellulose	" "	217	98.0
Cement	" "	5359	99.2
Cotton fabrics	million meters	344	99.0
Woolen fabrics	" "	39	112.2
Silk fabrics	" "	34	109.8
Shoes (excl. slippers)	million pairs	18	102.3
Sterilized canned vegetables	thou. tons	285	87.1
Canned fruits	" "	263	102.4
Butter	" "	21	102.9
Vegetal cooking oils	" "	156	117.4

New and improved items and technologies were applied. The results achieved by some basic ministries were the following:

	New and improved Good	Technologies
Ministry of Chemical Industry	41	240
Ministry of Machine Building	170	237
Ministry of Electronics and Electrical Engineering	471	226
Ministry of Light Industry	104	122
Ministry of Metallurgy and Mineral Resources	37	92

Some ministries and departments failed to fulfill their contractual obligations for deliveries of raw materials, materials and cooperated items, mainly in terms of variety and specifications, as a result of which the plan for the implementation of contracts was fulfilled 95.7 percent.

II. Agriculture

In 1980 agricultural output totaled 5,070,000,000 leva (based on 1971 prices).

The following basic agricultural commodities were produced by all category farms.

	Measure	1980	1980 in % of 1979
Grain-total	thou. tons	7716	90.6
Including: Wheat	" "	3839	114.4
Sunflowers	" "	376	88.1
Oriental tobacco	" "	110	81.5
Sugar beets	" "	1445	70.7
Tomatoes	" "	788	96.5
Green and red peppers for fresh consumption	" "	229	84.8
Fruits-total	" "	1900	102.2
Including: Apples	" "	363	127.4
Grapes	" "	959	95.0
Meat (in slaughtered weight)	" "	692	100.7
Milk (in kind)	million liters	2146	100.3
Eggs	millions	2480	108.4
Wool	thou. tons	35	100.0
Freshwater fish	" "	13	127.7

The reduction in the production of some basic crop growing products compared with 1979 was due mainly to adverse weather conditions.

On 1 January 1981 the number of farm animals in the country was as follows:

	1 January 1981 thousands	1 January 1981 in % of 1 January 1980
Cattle	1796	100.5
Including: Cows	702	100.9
Sheep	10433	99.0
Hogs	3805	99.4
Poultry	1647	101.6

In 1980 antierosion measures were applied to protect about 1.5 million decares. Nearly 12,000 decares of disturbed areas were recultivated and about 21,000 decares were drained. Chemical reclamation was carried out and the fertility of 98,000 decares of saline soils and soils with a harmful acetic content were carried out. Over 2.9 million decares were treated with biological means and comprehensive plant protection methods. Over 400,000 decares were planted in new forests.

III. Construction

The construction organizations carried out construction and installation projects worth 3.5 billion leva or 1.3 percent more than in 1979.

Productive capital worth 5.9 billion leva was installed, or 7.7 percent more than in 1979. The following projects were completed: the third turbine of the Maritsa-Iztok 3 Thermoelectric Power Plant; the third reactor of the Kozloduy Nuclear Power Plant; the benzine production facility at the petrochemical combine in Burgas; a plant for chlorine, vinylchloride and polyvinylchloride in Devnya; the expansion of the K. Rusinov Shipbuilding Plant; a plant for steel wire and cables in Roman; a plant for fittings in Mikhaylovgrad; capacities for fine wrapping paper at the V. Kolarov State Cardboard Factory in Kostenets; the G. Traykov Plant for Pressed Surfaces; the first expansion of the USSR-Bulgaria gas pipeline; the ZTCh [presumed expansion: Plant for Telephone Spare Parts] in Lovech; the Pyasuchnik Dam in Plovdiv; the Sredna Tundzha irrigation system; the MEZ in Polski Trumbesh; the Slavyanka factory in Tutrakn; and the first and second technological lines at the V. Kolarov State Cement Plant in Temelkovo.

In 1980 about 50 percent of the construction and installation projects were carried out on the basis of industrial methods. Over 90 percent of the earth removal work was carried out with mechanized facilities and 61 percent with comprehensive mechanized facilities.

IV. Transportation and Communications

The work done by all types of transport facilities totaled 92,922,000,000 tons/kilometers and 29,573,000,000 passenger/kilometers. Compared with 1979 the number of ton kilometers rose by 2.4 while that of passenger/kilometers by 1.7 percent.

Some basic technical and economic indicators of the utilization of transport facilities were improved. The average gross weight of a freight train rose 3.7 percent compared with 1979; the use of freight cars was improved 0.1 percent. The share of electrified tracks reached 34.4 percent of the total.

The transportation system failed to meet in full the needs of the national economy for freight haulage. Compared with 1979 freight haulage declined 2.1 percent. The decline was in automotive and water transport. The turnover of freight cars and their average daily runs declined. The container system and the comprehensive mechanization of loading and unloading operations are being developed too slowly.

Compared with 1979 income from communications services rose 9.7 percent.

In 1980 29 new postal telegraph and telephone stations were added to the postal services network. Another 119,000 telephone sets were installed. The automation of long distance telephone communications reached 63 percent. All okrug centers have direct dialing telephone communications with Sofia. Intra-okrug automation of telephone communications was introduced.

V. Foreign Economic Relations

Compared with 1979, in 1980 foreign trade rose 14.1 percent. This increase was largely due to the ever growing trade with the USSR and the remaining CEMA-member countries. About three-quarters of the 1980 trade was with CEMA-member countries and over 50 percent was with the Soviet Union.

Trade with developed nonsocialist and with developing countries rose as well.

The positive changes in the structure of exports were continued in 1980. The volume of highly processed goods is rising steadily. Compared with 1979, additional amounts of machines and equipment worth 553 billion foreign exchange leva were exported.

As a result of the steadily expanding socialist integration, the share of exported specialized goods has been rising steadily. The share of specialized machines and equipment exported totaled 53.9 percent of the overall volume of machines and equipment.

Bulgaria is actively participating in joint construction of major production projects in the USSR such as the Ust'-Ilimsk Cellulose Plant, the Soyuz Main Gas Pipeline, the Kiyembay Asbestos Combine, the Vinnitsa-Albertirsa Electric Power Cable and others.

The participation of the transportation system in the international division of labor increased.

International tourism continued to develop. In 1980 Bulgaria was visited by 5.5 million foreigners.

VI. Living Standards of the People

Compared with 1979, the 1980 real per capita income was 2.7 percent higher. The average monthly wage in the national economy reached 181 leva.

The growth of public consumption funds continued. In 1980 they exceed 5.4 billion leva. Ever greater attention was paid to their proper channeling and to upgrading their social effectiveness.

Three-quarters of the produced national income were channeled into the consumption fund. In 1980 retail trade exceeded 12 billion leva.

Consumption of Some Basic Comestible and Durable Goods per Capita in 1980:

Bread and bakery goods--kilograms	215.6
Meat and meat products--kilograms	62.5
Fish--kilograms	7.2
Rice--kilograms	4.2
Vegetal cooking oils--kilograms	15.1
Butter--kilograms	2.4
Milk and dairy products (excluding butters) with 3.5 percent fat content--liters	196.0
Eggs--pieces	203
Sugar and confectionery goods--kilograms	34.2
Fresh and canned vegetables--kilograms	98.0
Fresh and canned fruits--kilograms	106.0
Cotton fabrics--square meters	24.7
Woolen fabrics--square meters	4.7

Silk fabrics--square meters	3.5
Shoes (excluding rubber shoes)--pairs	2.0
Knitted goods--pieces	12.0

Availability to the population of a number of household items improved. In 1980 there were 77 television sets, 71 washing machines, 77 refrigerators, and 29 passenger cars per 100 households.

Trade and consumer population services improved. In 1980 the average store served 237 people while seats in public catering institutions reached 1,573 per 10,000 population. Household services do not meet in full the increased needs of the population.

In 1980 the population received 74,000 housing units or 12.1 percent more than in 1979. New kindergartens for nearly 9,000 children and nurseries for 1,600 children were completed.

The further improvement of settlements continued. Environmental protection measures are being successfully implemented. By the end of 1980 the number of protected natural sites totaled 2,519 on an area of 1.4 million decares, or 1.3 percent of the territory of the Bulgarian People's Republic.

The educational standards of the people continued to rise. In 1980 more than 56,000 young men and women graduated from secondary schools. More than 54,000 specialists were trained for the national economic sectors, 19,000 of whom with higher education, 9,000 with semihigher education and 26,000 with secondary specialized education. Over 7,000 higher education graduates are in the engineering and technical fields.

The year-round and seasonal kindergartens took care of about 76 percent of children aged three to six; nurseries and mother and child homes accomodated 21.2 percent of all children under the age of three, compared with 20.2 percent in 1979.

By the end of 1980 there were 111 hospital and sanatorium beds per 10,000 population. There were about 407 people per physician, compared with 416 in 1979 and about 1,850 per dentist, compared with 1,906. By the end of 1980 the number of places in social care institutions reached 20,500. Household social care was expanded. It benefits old and disabled people living alone who are cared for in their homes. A total of 472 clubs for retired were opened. The number of beds in rest homes rose by about 96,000. They were used by about 810,000 people. The recreation of 38.6 percent of school students from the first to the 11th grade was organized in student camps, compared with 36.9 percent in 1979.

In 1980 there were 16,420 theater performances attended by 6.3 million people. A total of 31 full-length, 252 short and medium-length motion pictures, 58 newsreels and 172 television films were produced. The book supply of libraries rose from 69.7 million volumes in 1979 to 72.4 million in 1980. The publication of books and pamphlets rose from 52.1 million to about 58 million.

By the end of the year the Bulgarian population totaled 8,878,000 people.

[Insert] The 1980 national income exceeded 20 billion leva.

The annual plan for social labor productivity was fulfilled 102 percent.

Above-plan profits totaled 440 million leva.

In 1980 capital assets worth 5.9 billion leva were commissioned.

Social consumption funds exceeded 5.4 billion leva.

During the year 74,000 housing units were completed and delivered to the population.

Real per capita income rose 2.7 percent compared with 1979.

The results which the Bulgarian People's Republic achieved in its 1980 development confirm the proper April political line of the Bulgarian Communist Party in the economic, social and cultural areas. They represent a firm foundation and a prerequisite for a comprehensive turn toward higher effectiveness and quality of public production and for the accelerated application of the achievements of scientific and technical progress in the Eighth Five-Year Plan.

9003
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TRADE RELATIONS, COOPERATION WITH DEVELOPING COUNTRIES EXAMINED

Sofia POLITICHESKA PROSVETA in Bulgarian No 1, 1981 pp 88-95

[Article by Zhivko Nenov, candidate of economic sciences: "The Bulgarian People's Republic and the Developing Countries"]

[Text] For several decades the Bulgarian People's Republic has pursued a policy of intensive contacts and close cooperation with the developing countries, i.e., with the newly liberated countries in Africa, Asia and Latin America, countries which are fighting imperialism and neocolonialism and are promoting their national rebirth and social progress. The range of problems on which the attention of propagandists discussing this topic must be drawn* is why is it that this course pursued by the BCP and the Bulgarian People's Republic is principled and consistent, what are its role and significance, what are its specific manifestations on the bilateral level and in cooperation with the socialist countries, and why is it that bourgeois propaganda misrepresents the policy of the socialist countries, including that of Bulgaria, toward the developing countries? These questions may be presented in the following sequence:

1. Nature, purposes and directions of the foreign political course pursued by the Bulgarian People's Republic towards the developing countries;

2. Content and form of economic and scientific and technical cooperation between the Bulgarian Peoples' Republic and the developing countries.

In our description of the foreign policy of the BCP and the NRB [Bulgarian People's Republic], we must stress that it is invariably based on Marxism-Leninism and proletarian internationalism. Our economic, political and cultural relations with the developing countries are based on the principles of equality, mutual benefit and respect for national sovereignty. As a socialist country the NRB is not trying to obtain unilateral advantages. It does not have any selfish or exploitative objectives concerning these countries.

The foreign policy and international relations of the NRB are based on the class principle and are consistent with the requirements of the struggle for the revolutionary reorganization of the world. On the basis of this viewpoint two main

* As aid to students of "Topical Problems of BCP Domestic and Foreign Policy," Topic No 17.

aspects must be emphasized: first, our solidarity with the developing countries is not a manifestation of abstract humanism or abstract national sympathies but an expression of the need for the establishment of a close combat alliance, of a united front facing the common enemy--world imperialism; second, the nature and extent of our cooperation with the individual developing countries is based on their political and socioeconomic orientation. Bulgaria is maintaining particularly friendly relations with countries which have chosen a socialist way of development. Socialist internationalism and fraternal friendship and mutual aid are basic principles governing our foreign policy toward them. Our country has signed friendship and cooperation treaties with some such countries. The attitude of the BCP and the NRB toward countries with a socialist orientation was expressed most aptly by Comrade Todor Zhivkov in the course of his visit to several African countries.[1]

Characteristically, ever closer interparty relations are added to intergovernmental relations and to our cooperation with these countries. For example, this is the nature of the relationship between the BCP and the MPLA--the Angolan Labor Party--, with FRELIMO in Mozambique, the BAATH Arab socialist party in Syria, and others.[2] The BCP is helping these currently developing revolutionary parties by sharing with them its long experience in party construction, in resolving problems of united fronts, and other complex political problems. The Bulgarian Agrarian National Union as well is being active in this respect. It maintains lively contacts with various similar public organizations, political parties and movements in the Third World.

The nature of our country's foreign policy toward the Third World should be related to the basic party and government documents. The BCP program stipulates that the purpose of the systematically international and truly democratic and profoundly peaceful nature of Bulgarian foreign policy is to contribute to a maximum extent also to the "...strengthening of the liberation struggle waged by the peoples and the working people in the development and intensification of the global revolutionary process, the unification of all revolutionary forces in the struggle for national independence and against imperialism, for strengthening the peace and cooperation among nations and for the victory of socialism throughout the world."[3]

The party program expecially emphasizes that relations between the BCP and the NRB, on the one hand, and the developing countries, their peoples, their political movements and their parties and leaders, on the other, are relations and policies of a new type. They are based on and are a manifestation of the conviction that the alliance between socialism and the national-liberation and revolutionary-democratic movements is both natural and necessary and that a policy of equality, understanding and cooperation among countries and peoples must counter the imperialist policy of unequal relations , dictate and enslavement.

The firmness of this principled line was convincingly reasserted at the 10th session of the National Assembly, held at the end of April 1979. "Loyal to our revolutionary convictions and communist ideal," Comrade T. Zhivkov stated in his speech on Bulgarian domestic and foreign polciy, "we feel sincere sympathy for the developing countries and are giving them selfless moral-political and material support. In its relations with them the NRB observes the principles of equality and mutually profitable cooperation. We welcome and support the natural aspiration of the developing countries for gaining total control over their natural resources, developing their production forces and promoting their national culture. We support their demand for a reorganization of international economic relations on a just and democratic basis.

We unequivocally oppose the reactionary imperialist attempts and efforts to pit one developing country against another, promote hatred and discord and provoke military conflicts between them. We are assisting them in their efforts to strengthen their independence as states."[4]

Using facts and examples, the propagandists must describe specific cases of the practical implementation of the basic principles of Bulgarian foreign policy toward the developing countries and their political forces, parties and movements.

Let us emphasize that in the United Nations the government of the NRB has invariably defended the interests of the national-liberation movement and supported all revolutions directed at the full and entire elimination of colonialism, and has initiated a number of motions in support of the peoples of the former colonies. For example, we are familiar with the active support which the NRB is providing the anti-imperialist trend in the struggle waged by the developing countries for a new international economic order and for the democratization of international economic relations and institutions. Our country supports the position and movement of nonaligned countries on a number of problems of the contemporary international situation.

Particular attention should be paid to our inflexible position in support of the struggle waged by the Arab peoples against Zionism and imperialism and to the political and material support which we are providing for the triumph of the just cause of the Arab people of Palestine and for the development of relations with all Arab countries. Bulgaria supports the struggle of the Arab peoples against the separate Camp David deal. It condemns the nefarious and provocatory role played by the United States, which is a factual coparticipant in the crimes committed by Zionist expansionism.

The 22 April 1980 Damascus meeting between Comrade Todor Zhivkov and Yassar Arafat, chairman of the PLO Executive Committee, was yet another vivid demonstration of the unreserved political support given to these peoples and, above all, to the Arab people of Palestine. The Bulgarian party and state leader expressed equally unreserved support of the decisions adopted at the fourth conference of the state leaders of countries belonging to the hard-line front of continuing to pursue a policy of decisive opposition to Zionism and American imperialism.

Recently new conflict situations broke out in the Middle East and subsequently developed into a head-on military confrontation between Iran and Iraq. The lasting and peaceful policy of the NRB and its traditional political, economic and cultural relations with the countries in that area dictate our clearly manifested position in support of the peaceful settlement of this dangerous conflict.

The inflexible, firm and consistent support of the countries of the African continent in their struggle against colonialism, neocolonialism, racism and apartheid, its unreserved support of the corresponding resolutions passed by the Organization of African Unity and the United Nations, and our constant efforts to energize political relations with these countries are of basic importance in the relations between the NRB and these countries. This particularly applies to countries such as Angola, Mozambique, Zambia, Tanzania and others. Our country decisively and categorically condemns the racist regime in the Republic of South Africa and its illegal occupation of Namibian territory.

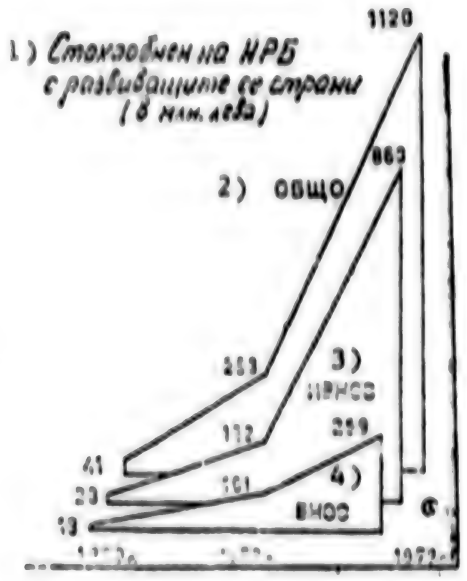
The NRB maintains an active position of peaceful coexistence and cooperation and support of progressive and democratic changes in the case of Asian and Latin American countries as well. We have long traditional ties with most big Asian countries and, above all, the Republic of India. The ties between Bulgaria and the other developing countries on the Asian continent are becoming politically richer. Some of them, such as Burma, Sri Lanka and others, are currently formulating and resolving complex problems of national renovation, developing new political and social structures and defending their gains from the forces of international imperialism.

Bulgaria's contacts and cooperation with a number of Latin American developing nations are not of long duration but show good possibilities. In recent years relations with such countries have been energized considerably: visits of official delegations have been exchanged and a total of 42 treaties and agreements for cooperation in the economic, scientific, technical and cultural fields have been signed. Let us note the good political climate prevailing in relations between the NRB and Mexico, Venezuela and, of late, Nicaragua.

The position held by the NRB in support of the activities of developing countries in support of their efforts toward unification and joint action against imperialism and the building of a world without wars, based on equality, cooperation and justice, enjoys deserved popularity among these countries. This applies mostly to the movement of nonaligned countries and in the case of a number of meetings among and organizations of developing countries.

The NRB is engaged in intensive, comprehensive and steady development of economic and scientific and technical cooperation with virtually all developing countries. This cooperation is based on their common interest and has a real base. In order to establish in our country a complete material and technical base for mature socialism and enhance the living standards of the people, we must unquestionably most actively participate in international trade and division of labor. The same interest is shared by the newly liberated countries which were left with the difficult legacy of colonialism. In order to surmount their economic backwardness, they obviously need socialist foreign aid and cooperation. They can receive such real aid, above all, from the socialist countries, including the NRB, by virtue of the latter's powerful scientific and technical, industrial and cadre potential. In other words, it could be said that the growing interest in expansive and comprehensive economic relations between the two groups of countries is based on the possibilities for reciprocal complementing of their economies.

It is especially on this basis that in recent years economic and trade cooperation between the NRB and the developing countries has been developing more rapidly and acquiring an ever more substantial and important national economic significance. Between 1960 and 1979 their trade has increased from 40.9 million leva in 1960 to about 253 million leva in 1970 and to over 1 billion 120 million leva in 1979. Within the same period of time the Bulgarian share of trade with developing countries has risen from 2.9 percent in 1960 to 7.4 percent in 1979. Within the same period--from 1960 to 1979--exports to developing and young independent countries rose from 23.4 million to 863.2 million leva, or by a factor of about 37. Imports have increased by a factor of over 15, from 17.5 million leva in 1960 to close to 257 million leva in 1979.[5] (See diagram no 1).



Key: 1. NRB trade with developing countries (in million leva). 2. Total. 3. Exports. 4. Imports.

The faster development of exports may be explained, above all, by the competitiveness of Bulgarian export goods, including advantageous export prices and the granting of loans and credits for their development, which are extensive considering the scale of our economic relations. So far 88 major projects have been built in developing countries with the help of advantageous long-term and medium-term Bulgarian credits. They include a number of food, ore mining, agricultural and light industry enterprises. Our country has also granted credits to companies, even though small, with a view to financing exports.

Let us emphasize that along with an increasing volume the structure of mutual trade is developing and improving and that the forms and areas of economic cooperation are becoming richer and more varied. Today the modern industrial development of our economy and the possibilities of our domestic machine building, and chemical and power industries are being extensively used in exports and scientific and technical cooperation with the developing countries. The share of deliveries of complete projects and of technical assistance in the development of extracting and processing industry enterprises in the developing countries is growing. Let us note among the major deliveries of complete projects a canning combine and a ceramics plant to Iraq, a concentration factory, wine making plants and refrigerated warehouses to Syria, a canning combine and a ferrosilicium plant to Egypt, a textile combine, leather processing enterprise and plant for the production of window and door frames to Algeria, a dairy enterprise, tobacco treatment combine and a leather processing plant to Iran, a textile combine to Nigeria, plants for gammaglobulin and sulfuric acid to India, and many others.

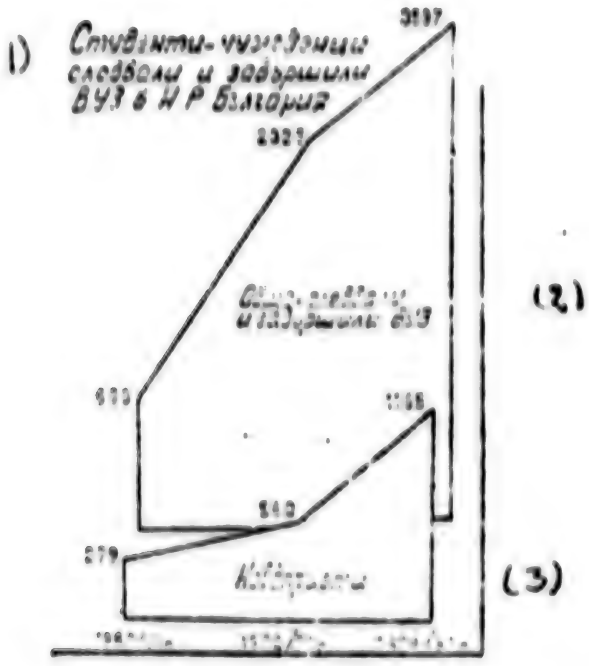
Construction accounts for a substantial share of such comprehensive activities. Along with direct construction activities, the Tekhnoeksportstroy Industrial Construction Organization--our leading organization in this area--is engaged in designing and providing authorship and investors' control, carrying out installation and electrical engineering operations for all kinds of installations and structures, drafting plans for territorial and urban development, and conducting topographic and geodesic operations in a number of developing countries.

Some of the major projects built by Bulgaria include the international airports in Baghdad and Tripoli, the olympic sports complex in Tunis, modern sports complexes in Tripoli and Benghazi in Libya, 16 polyclinics, hospitals and residential districts in the Libyan cities of Zawia, Homs, Benghazi, Sebcha and Ubari, roads and bridges and a number of extensive water reclamation projects in Iraq and Syria. A number of urban construction plans have been drafted for settlements and conurbation systems in Algeria, Tunisia and Morocco, plans for water and sewer lines and irrigation systems, and others.

The Bulgargeomin DSO [State Economic Trust] is very active in geological surveys and mining construction in Libya, Iraq and Algeria. The trust is engaged in a variety of geological surveys for the extraction of petroleum, natural gas, petroleum shale, coal, nonmineral deposits, and so on. It is engaged in the building and installation of metal structures and complete enterprises. Some of the major projects carried out by the trust's specialists are the pipelines with two pipes under the rivers Tigris and Diyala in Iraq, the Kerzet Yusef mining concentration complex in Algeria, and others. Trust specialists working in these countries are engaged in extensive hydrological studies as well.

Extensive projects will be carried out by the Agrokomplekt ISO as well. The trust has completed contracts for the building of dams, irrigation systems and poultry farms in Libya, Iraq and other Arab countries.

Today the sending of Bulgarian specialists to work in developing countries is one of the important forms of cooperation in their economic development and other important areas. Currently there are over 10,000 of them. Bulgarian medical personnel are at work in Tunisia, Morocco, Algeria and Libya. In a number of cases Bulgarian medical teams are in charge of providing full services to the biggest local health institutions, namely hospitals and polyclinics. An ever larger number of Bulgarian teaching cadres are being assigned to developing countries and are most highly rated by the proper authorities of countries such as Tunisia and Algeria. They formulate university curriculums and programs and have initiated new ways and means of training, including ever more extensively research and practical applied elements. Naturally, experience and knowledge are shared with local cadres through other forms of economic and technical cooperation as well, including the vocational training system and the secondary and higher education systems in Bulgaria, where hundreds and thousands of specialists from developing countries are acquiring the necessary knowledge. The number of foreign students who have attended and graduated from Bulgarian higher educational institutions has been rising steadily (see diagram no 2).



Key: 1. Foreign students who have attended and graduated from higher educational institutions in Bulgaria. 2. Total number of university students and graduates. 3. Newly enrolled students.

In turn, in the course of the development of their trade and other forms of cooperation with Bulgaria, the developing countries are obtaining growing access to and good welcome in our socialist market. Along with their basic and traditional exports--mainly mineral and agricultural resources--they are also selling increasing volumes of output of their new industrial sectors such as household equipment, textiles, clothing and others. In this case they use both trade facilities in terms of customs fees and credit and payment conditions as well as favorable opportunities offered by specific methods for encouraging and increasing the stability of trade and other economic relations such as trade-economic agreements and trade protocols. The NRB has long-term agreements with a number of developing countries on the development of economic and scientific and technical cooperation, trade and payments, cooperation in agriculture, transportation, navigation and fishing, and others. The new intergovernmental commissions and organs for economic and scientific cooperation and the steadily expanding contractual-legal and institutional-organization base of such relations play a substantial role in the energizing of economic relations.

The opportunities for increasing comprehensive economic relations between socialist CEMA-member countries, including Bulgaria, and the developing countries and their regional organizations are increasing with the intensification of socialist economic integration.[6] For example, a result of the practical efforts in this direction is the special bank for crediting measures for economic and technical cooperation offered to young independent countries, totaling one billion transferable rubles, set up by the International Investment Bank of CEMA-member countries. A special fund has been created for the training of cadres for the developing countries. The possibility is also considered for such countries to participate in the multilateral payment system through the International Bank for Economic Cooperation. A number of agreements have been concluded between CEMA and individual developing countries (Iraq, Mexico). Possibilities are under study of involving developing countries as partners

in the implementation of long-term market cooperation programs which contemplate the implementation of major joint measures in decisive material production areas such as the power industry, the fuel-raw material sectors, agriculture, the food and light industries, and machine building. The intensification of multilateral economic relations and of aid given to the developing countries unquestionably opens new additional possibilities of intensification of relations between the socialist and the developing countries. It expands their scope and creates prerequisites for more lasting and stronger ties and serves as a transmission belt for new economic and social impulses. It increases the prestige of relations with real socialism and strengthens the positions of left-wing and progressive forces in the Third World.

The development of relations between Bulgaria and the remaining socialist countries, on the one hand, and the developing countries, on the other, in science, education, ideology and others also presumes joint efforts and coordinated actions on the part of the socialist comity as a whole. Improved coordination and unity of action can considerably upgrade the influence of real socialism in the Third World.

It would be expedient at precisely this point, as we consider the policy of the NRB toward the developing countries and the contacts between them as an organic part of the policy of the socialist comity, to draw attention to the misrepresentations on the part of bourgeois propaganda of the policies pursued by the socialist countries toward Third World countries. The "critics" of our foreign policy, whether operating in Washington or Beijing, or anywhere else, as a rule do not try to undermine the international prestige of Bulgaria, Poland, Czechoslovakia or Hungary alone. They focus their attacks, above all, on the comity and, most of all, on the main force within this comity--the Soviet Union. The strategic objective of the subversive activities of the imperialists and the Third World puppets they support is to separate progressive forces in the developing countries from the Soviet Union and the members of the socialist comity and to undermine one of the gains of the contemporary global revolutionary process--the reciprocal trust and support between socialism and the national-liberation and revolutionary-democratic movements in the Third World. Such is also the purpose of the dissemination of the myth of the "Soviet threat," and of attempts to discredit and distort and misrepresent relations within the socialist comity and the communist movement. A number of examples could be cited in this connection. The latest is related to the events in Afghanistan and the international support which the Soviet Union and the other socialist countries are giving the Afghan people.

However, regardless of how slanderous and hostile the myths fabricated by Western propaganda centers may be, the peoples, progressive political movements and leaders in the developing countries are becoming convinced by themselves, on the basis of their own experience, of the advantages of cooperating with the NRB and the other socialist countries. To an ever greater extent they can see the great contribution of such countries to the cause of the national-liberation movement against imperialism and for socioeconomic progress in the developing countries.

The Bulgarian People's Republic is making its contribution to the growing trust in and prestige of the socialist countries in Africa, Asia and Latin American countries.

FOOTNOTES

1. See RABOTNICHESKO DELO, 12 June 1978 and 18 November 1979.

2. See RABOTNICHESKO DELO, 8 December 1980.

3. Program of the Bulgarian Communist Party. Partizdat, 1971, p 100.

4. T. Zhivkov. "Za Vutreshnata i Vunshnata Politika na Narodna Republika Bulgariya" [On the Domestic and Foreign Polciy of the Bulgarian People's Republic]. Partizdat, 1979, pp 33-34.

5. Statistical Yearbook of the Bulgarian People's Republic, 1980, p 384.

6. For details see POLITICHESKOYE SAMOOBRAZOVANIYE, 1980, p 41.

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FUTURE FOREIGN TRADE PERSPECTIVES VIEWED

Prague HOSPODARSKE NOVINY in Czech 21 Nov 80 pp 1, 5

[Article by Jiri Hlidek and Josef Major, workers at the CPCZ Central Committee: "Demanding Criteria"]

[Text] The report of the Presidium of the CPCZ Central Committee which was read at the 18th Plenary Session of the CPCZ Central Committee emphasized the requirement of more effective use of intensive factors in economic growth. The preliminary guidelines on the elaboration of the draft of the Seventh Five-Year Plan formulate this urgent requirement as:

--substantially better utilization of raw materials, energy, materials, fixed assets and human labor;

--more rapid and wider application of scientific and technical progress;

--indispensable increase in export competitiveness of our economy, and more active and wider Czechoslovak participation in socialist economic integration.

External economic relations markedly affect the basic proportions of development of the national economy and its efficiency. Their expansion is--both from the standpoint of external and internal conditions--one of the most important key issues of the Seventh Five-Year Plan.

Internal, External Conditions

Major changes, particularly in the price area, have been taking place in the world economy for a number of years. The rapid increase in prices, particularly of basic raw materials and has energy, meant for the CSSR--which imports raw materials and energy in considerable quantities--a constant increase in the cost of imports. The rise in import prices has exceeded the increase in prices of goods exported by us.

Thus, during the first 6 months of 1980, for example, our export prices to the nonsocialist countries increased by 12.7 percent, while the import prices increased by 14.1 percent and the prices of raw and basic materials almost 18 percent during the same period. In comparison with 1975 (100 percent), the exchange relations, that is, the relation between export and import prices, were 94.2 percent as of 30 June 1980. This fact naturally adversely affected our balance of payments. It must be emphasized that we were able to neutralize these effects and achieve smooth functioning of our economy during the Sixth Five-Year Plan despite them by occasionally resorting to external resources.

The dynamic development of the Czechoslovak economy therefore will continue to depend on to what extent and how efficiently we succeed in securing funds necessary for financing of imports of raw materials and how effectively we will utilize these raw materials. Apart from the unfavorable trend in price relations, the conditions deteriorated for us also in the credit and interest area, as well as merchandising conditions on the markets of developed capitalist states due to their discriminatory policy toward the socialist countries.

The 18th Plenary Session of the CPCZ Central Committee again emphasized that the future development of external economic relations would take place in increasingly complex and demanding conditions. From this standpoint, it is necessary to systematically elaborate the conception of the development of external economic relations with proper linkage to the planned development of the national economy. During the 1981-1985 period, attention must be focused particularly on the solution of the following problems:

--Czechoslovak external economic relations must be based on further purposeful and effective intensification of Czechoslovak participation in the international division of labor and on the economic integration with the CEMA states, particularly the USSR, primarily in the form of such specialization and cooperation which will result in the real savings of national labor, increase in technical standards of Czechoslovak products and reduction of consumption in the production sector;

--the development of the entire Czechoslovak economy must be conceived in such a way that the demanding international criteria and criteria of external economic balance and dynamics of effective commodity exchange with foreign countries will occupy the most prominent place in the system of criteria according to which decisions on the future trend in the reproduction process will be made;

--capital investment projects must be linked much more than in the past to export goals, while intensive attention must be paid to the microstructural changes and innovations in order to increase competitiveness of Czechoslovak products on the principal world markets;

--conditions must be created for the gradual restoration of external balance of the Czechoslovak national economy. To achieve this goal, the growth rate of exports must significantly exceed the growth rate of imports at comparable prices, and export competitiveness of the entire Czechoslovak economy, and particularly of the engineering and industry, must be increased;

--imports must be reduced to the minimum and most effective use must be made of both domestic and imported raw and industrial materials and of imported machinery and equipment.

Economic Import Alternative

Our production and foreign trade must take for granted that the conditions on the world markets will not improve during the next 5-year period. On the contrary, those forecasts are obviously realistic which indicate that these conditions will be even more difficult. For this reason, it was necessary to take, in the guideline on drafting of the Seventh Five-Year Plan, a demanding approach to the external economic

relations in order to achieve balanced proportions in this area. This will require a substantially bigger increase in exports than in imports, both in relation to the socialist countries and to the capitalist world. At the same time the scope of inputs--imports--must be regarded as the maximum limit, while the outputs--exports--must be regarded as minimal.

The total imports are to increase approximately one third at comparable prices during the Seventh Five-Year Plan. The Czechoslovak engineering industry must make the biggest contribution to the fulfillment of export tasks and this is the key task of the next five-year plan. The anticipated changes in the commodity structure of Czechoslovak exports which follow from the needs and planned development of the entire national economy are characterized on the one hand by the restriction of exports of metallurgical materials and timber, and slower increase in the exports of consumer goods and some chemical products, and on the other hand by a substantial increase in exports of machinery and equipment.

The changed external and internal conditions compel us to take for granted only the very economical variant of imports. This will place big demands on the entire national economy which must produce more goods both for domestic trade and foreign markets, despite the relatively smaller volume of imports. This will require not only a bigger mobilization of domestic resources, but also a much more effective utilization of imported raw materials. This applies particularly to the imports of crude oil, nonferrous metals, iron ore-based raw materials, basic raw materials for the food industry and domestic trade. Very strict criteria will have to be applied to the imports of machinery from all areas both in terms of quantity and quality and technical standards. Imports of machinery and equipment from the nonsocialist countries will have to be effected with special regard to the future profitable reexports and economy measures that will contribute to the most rapid and most effective restoration of the balance of payments. It will be imperative to categorically insist on and verify documentary evidence of foreign exchange gain which is supposed to result from these imports.

The extraordinarily urgent task is the creation of conditions under which it will be possible to reduce the present excessively large imports of fodder from the nonsocialist states.

Stabilizing Element of Czechoslovak Economy

The basis of expanded external economic relations is the economic cooperation with the CEMA member states, particularly with the Soviet Union. The long-term goal-oriented programs of cooperation and the results of coordination of national economic plans among the CEMA member states provide for the annual imports of most important fuels and raw materials approximately on the 1980 level which--in comparison with their total imports during the Sixth Five-Year Plan--represents another increase. Due to the more rapid increase in the world prices of raw materials--as compared with the increase in the prices of finished products--the imports of raw and industrial material in the same physical volume from the socialist states will require additional exports for their financing. Under these circumstances we will have to pay special attention to the more effective utilization of raw materials imported from the socialist countries when drafting the Seventh Five-Year Plan.

On the other hand, however, realistic conditions exist for increasing the division of labor within individual sectors of processing industries as well as the possibilities of increasing the exchange of finished products. Of special importance in this respect is the program of cooperation and specialization signed by the CSSR and USSR for the period up to 1990 whose implementation will result in greater concentration of scientific-technical development on the smaller assortment of our products, more rapid production rationalization and access to progressive technologies from the Soviet Union, both by scientific-technical cooperation and by imports of machinery and equipment.

Increased attention must be paid also in the future to the big expansion of production specialization and cooperation with the CEMA member states which constitutes a reliable material basis for a further increase in the mutual commodity exchange.

Past results make it clear that the deliveries from the sectors based on production specialization and cooperation constantly increase. The share of shipments based on the agreements on production specialization and cooperation will account for approximately 23 percent of our exports this year and will exceed 31 percent in the category of machinery and equipment. In imports, this share will exceed 15 percent and 28 percent in the group of engineering products. In the total number of 321 contracts on production specialization and cooperation the engineering industry accounts for 248. Among the principal items manufactured on the basis of production specialization and cooperation are, for example, metal-working machine tools and farming machines, communications equipment, diesel locomotives, railroad freight cars, trucks, tractors and agricultural implements, equipment for the nuclear power plants, pumps, compressors, machinery and equipment for chemical and food industries, machinery for the textile industry, antifriction bearings and so forth.

The results of coordination of national economic plans with the CEMA member states constitute the backbone of our future economic development and the basis for the dynamic increase in the mutual commodity exchange. Their evaluation reveals that Czechoslovak exports to the CEMA member states will increase approximately 29 percent and the imports from this area almost 23 percent during the 1981-1985 period.

This very fact compels us to focus attention also in the area of exchange with the socialist countries on the intensive factors and on the improvement of the structure and higher technical standards of mutually exchanged products. If we judge the results of coordination of national economic plans from these standpoints, they represent an important stabilizing factor for the development of the Czechoslovak economy also during the next five-year plan. Nevertheless, the scope of mutual relations with the socialist countries cannot be regarded as closed on the basis of coordination results. Apart from the fact that we must carry out the assumed obligations with responsibility, we must intensively explore additional possibilities of expanding these relations, reducing the undesirable dependence on the imports from the nonsocialist countries, and mitigating the consequences of the unfavorable trend in exchange relations which has resulted from the increase in world prices and the structure of our foreign trade.

Relations With Nonsocialist States

The most complex part of the draft of the Seventh Five-Year Plan concerning external economic relations is the area of the expansion of foreign trade with the nonsocialist countries. The crisis situation of the world capitalist economy and the policy pursued by a number of nonsocialist states toward the socialist countries constituted a negative factor in expanding mutual economic relations during the last decade. In view of these circumstances, we must work out such a conception of expansion of our relations with the nonsocialist countries which will not disrupt the planned development of the Czechoslovak economy, will create conditions for financing of indispensable imports and will restore the balance in the economic relations with these states.

The basic premise for better relations with the nonsocialist countries is in the first place an increase in effective Czechoslovak exports which should increase at least by one-third during the Seventh Five-Year Plan.

The preliminary guidelines for drafting of the five-year plan assume that the Czechoslovak engineering industry in particular will play a more important role than hitherto in the structure of exports to the nonsocialist countries. During the previous five-year plans we compensated for the shortcomings of our engineering industry partly by exports of raw materials, primarily of metallurgical products and timber, and partly by exports of consumer goods. The conditions of such financing will not exist during the Seventh Five-Year Plan. For this reason, it is imperative for the Czechoslovak engineering industry to react, much more flexibly and with greater initiative, to the demands of foreign markets in regard to the higher technical and qualitative standards, functional reliability of products, service and supply of spare parts, prompt delivery, completeness of assortment, delivery terms, appropriate packaging and so on. These requirements can be largely met immediately with the existing technical equipment, technologies and materials available to our production sectors and without additional investment--in other words, with the present Czechoslovak production potential. We cannot be reconciled any longer with the fact that prompt deliveries are sometimes made dependent on additional material inputs, investments and labor force.

Direction of Our Efforts

In the area of heavy engineering, in exports of complete industrial plants--apart from the basic increase in their technical standards and their completion, on the basis of priority, in the supplier-customer relations--it is imperative in all instances to choose a general contractor, to shorten the delivery terms, including the preproduction and production preparation, and to provide service.

In the general engineering industry we must achieve greater flexibility in innovations and react promptly to the demands of demanding foreign markets particularly by more rapid modernization of cars, trucks, tractors, machinery for the textile and machine tool industries. The electro-engineering industry must fulfill the demanding tasks not only in its own exports, but must also significantly contribute by its deliveries of components and subassemblies to export competitiveness of other sectors.

The 18th Plenary Session of the CPCZ Central Committee pointed out that additional reserves for increasing Czechoslovak exports must be found in purposeful production cooperation with the firms both in the capitalist states and in developing countries. For illustration we can mention that only 43 cooperation agreements were registered during the first half of 1980. They account for approximately one percent of the Czechoslovak foreign trade volume with the nonsocialist countries. The engineering sectors account for more than 95 percent of this cooperation volume, while their share in total Czechoslovak engineering exports amounted to 2.4 percent in 1977.

Although the increased exports of engineering products are the indispensable precondition for further expansion of relations with this area, this does not mean that we may pay less attention to other areas of our exports to the nonsocialist countries. Exports of nonengineering goods will increase more slowly than exports of machinery during the Seventh Five-Year Plan. Nevertheless, they will play a key role in producing foreign exchange in relation to the nonsocialist countries also during this period. For this reason, the emphasis on quality, assortment and rapid innovations applies generally to all sectors.

Special attention must be paid to the chemical industry which, apart from the effective reduction of economically unnecessary imports, must gradually become a big exporter in its own right and thus contribute to the improvement of the Czechoslovak trade balance.

In the area of light and woodworking industry, it is necessary to focus attention on more effective utilization of raw materials and more efficient exploitation of domestic sources of raw materials, and prompt changes in the assortment as required, while maintaining the high quality of products and shortening the preproduction stages. At the same time, paper industry and wood-pulp production must be rapidly expanded in order to make most effective use of domestic wood substance. Exports of timber will significantly decrease (approximately to 20 percent) in favor of products made of wood during the last years of the five-year plan.

Exports of metallurgical products to the nonsocialist countries will decrease. In view of the limited scope of exports of rolled materials, attention must be focused on the changes in the assortment in favor of goods more advantageously priced, and exports of goods of less than first quality must be prevented.

The key to the solution of problems in the area of external economic relations both to the socialist and nonsocialist countries lies in the implementation of the strategic line of party economic policy calling for the increase in efficiency and quality of Czechoslovak production and economic activity in general. In the manufacture of export goods we must constantly bear in mind their technical and economic comparison with those principal participants in international trade who exert key influence on the international standard of useful properties and world prices.

Efficiency and Quality

To manufacture goods with high international competitiveness on the basis of application of the most progressive scientific and technical achievements, high labor productivity and relative small consumption of raw and industrial materials and energy, together with the indispensable after-sale service and supply of spare parts--this is the economic and political task of work collectives of our production plants.

Increasing the effect of the CSSR participation in the international division of labor is the key economic task of external economic relations and one of the principal tasks of our national economy in general. For this reason specific contributions to the effective expansion of external economic relations must be one of the main criteria of evaluation of work in all areas of both production sectors and foreign trade. The point is not only to produce and export the planned quantity of goods, but also to achieve the best possible results in terms of foreign exchange.

The demands of foreign markets in regard to the quality and technical standards of goods, delivery terms, service and supply of spare parts must be regarded as priority tasks of the entire society which must be fulfilled carefully and with full responsibility according to the plan. Indifference and lack of responsibility in this respect cannot be tolerated. We must not be satisfied with duplicating only what is manufactured and sold in the world--even if this is important and reasonable sometimes--but our production must show initiative and offer goods with new, better useful properties. Science, research and development must more actively participate in this effort.

The findings in regard to the implementation of the government guidelines for the elaboration of the draft plan of economic and social development during the 1981-1985 period by the economic units and individual ministries have so far revealed that the basic intentions of the guidelines have not been complied with. This fully applies also to foreign trade. According to the present state of the negotiations concerning supplier-customer relations, there is a deficit in export goods of approximately 12 percent in relation to the socialist countries and of approximately 20 percent in relation to the nonsocialist states. The engineering sectors alone lack approximately 15 percent of goods to be exported to the socialist countries, while approximately 30 percent of their prospective exports to the capitalist states have not yet been definitely settled.

But it is not only the quantitative indicator that matters. The government guidelines also ask the production sectors to process, in cooperation with foreign trade, the plans of technical development of key export branches and to assign specific tasks designed to accelerate innovation processes in such a way as to meet the planned export targets and create conditions for the optimum sales of Czechoslovak export products. For the time being, however, these programs of economic production units and foreign trade organizations do not manifest major changes in the structure or efficiency. According to the ideas of the production sector, we will offer mostly products of average technical standard to the foreign markets during the next five-year plan. The final effect in foreign currency, however, will necessarily correspond to this average quality. We cannot be indifferent to the fact that we lag behind our key competitors for example in machinery for the textile industry, or that our competitiveness is rather low in almost one-third of exported machine tools and forming machines. Also, we must handle more flexibly and more rapidly the problem of car production and exports in the Seventh Five-Year Plan and future five-year plans. The electro-engineering industry must participate more actively than it has till now in the external economic relations.

These are not simple problems. In view of the relatively limited resources, their solution must necessarily prefer those sectors and products in which we shall become competitive more rapidly. No less important is the maintaining of good technical standard and quality in other exported goods because only then shall we be able to hold our positions on the international markets.

Role of Incentive Customers

As we must in all spheres of domestic economy, we must improve the work of foreign trade, both in relation to foreign countries and in its function as an incentive and a demanding customer.

Foreign trade must work even harder than hitherto to achieve favorable effect from international commodity exchange. In the first place, it must skillfully make use of conditions and all possibilities on the foreign markets to achieve advantageous export prices and to carry out its import operations most effectively by improving its marketing policies and merchandising techniques. Under the conditions of continuing changes in world prices, a thorough calculation of prices is one of the principal elements of merchandising on which the final effect of commodity exchange with foreign countries depends to a considerable extent. For this reason, in accordance with the resolutions of the 18th Plenary Session of the CPCZ Central Committee, this area of foreign trade work must be strengthened by reorganization and addition of new qualified personnel because of its key importance in the relations to the socialist as well as nonsocialist countries.

Due to the changing conditions in international trade, individual areas and the world economy in general, the merchandising and credit conceptions together with the price policy in relation to foreign countries must be systematically reviewed and updated. The foreign trade organizations must more vigorously defend Czechoslovak trade interests by effective merchandising carried out on the high professional level and using different techniques depending on the specific conditions of individual markets. This will require among other things the improvement of the system of price documentation as the basic precondition of effective merchandising and also the improvement of commercial methods in foreign trade operations.

In all these areas, the foreign trade workers are expected to increase their initiative and render both long-term foreign trade policy and individual foreign trade operations more effective.

Cooperation of foreign trade with production must also conform to the demanding tasks in external economic relations during the Seventh Five-Year Plan. While observing a purposeful division of labor, the unity of actions must be achieved in pursuing goals of the entire society. In order to improve the situation in external economic relations, all responsible organs and workers in all production sectors and foreign trade organizations must show more "export-minded" initiative. This situation will undoubtedly improve also by the application of the "Set of Measures for Improving the Planned Management System of the National Economy After 1980," including the new system of foreign exchange incentives depending upon the foreign trade results.

The implementation of the guidelines on the drawing-up of the Seventh Five-Year Plan is a highly political task and cannot be regarded as a matter concerning primarily technical departments and planning authorities. The party work collectives must follow up with great responsibility and assist in the implementation of the resolutions of the 18th Plenary Session of the CPCZ Central Committee in all areas including a balanced and planned development of external economic relations. None of the managerial workers must leave out of account the words uttered by CPCZ General Secretary G. Husak at the 18th Plenary Session of the CPCZ Central Committee that "state plans of development of the national economy are not only administrative business, but a militant program of the party for the social and economic area."

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PRIORITIES IN ELECTRIC POWER STATED BY MINISTER

Bucharest ROMANIA LIBERA in Romanian 15, 19 Jan 81

[Interview with Gheorghe Cioara, minister of electric power, by M. Radian]

[15 Jan 81, pp 1, 5]

[Text] [Question] Your ministry is very important to the citizen because it is the chief producer and supplier of electric power and partly also of thermal energy. On the citizen's behalf I would like to ask you, comrade minister, to reply to a few questions. For example, what did the last five-year plan mean to your sector? How did it conclude the year and the five-year plan?

[Answer] The reply can only be favorable. I mention in particular that along with development of surplus energy resources in the 1976-1980 period, special emphasis was also placed on their most rational use. In the period to which we are referring, our sector made major progress in all respects, persevering in the tasks assigned it on the basis of the goals for energy development that were set at the 11th RCP Congress. The latter, as we know, called for priority on heat and electric power production through use of inferior fuels, especially lignite, in order to release hydrocarbons (fuel oil and methane gas) that can be better exploited in the chemical industry; more rapid improvement of the water power potential; use of secondary energy resources; completion of basic operations at the future Anina Thermoelectric Power Station burning bituminous shales; completion and testing of the capacities using new energy sources (wind, solar etc.) in order to generalize those power stations in future five-year plans; and the start of the first nuclear electric power station. Another basic task was that of reducing the specific consumption of heat and electric power in all activities. Those were our chief goals and the sector's personnel worked along those lines.

[Question] With what results? Please be specific.

[Answer] I think the main results are the 21 percent increase in electric power production based on coal in 1980 from 1975, the 65 percent increase in that based on secondary energy resources, and the 41 percent increase in that of hydroelectric power stations.

In the 1976-1980 period a capacity of 3,100 megawatts was installed in the thermoelectric power stations operating on coal, including 1,320 megawatts in the Rovinari

station, 990 megawatts in the Turceni station, and 420 megawatts in the Mintia station. Meanwhile improvement of the nation's water power potential was continued in this period by installing a capacity of 860 megawatts in the hydroelectric power stations and by raising the degree of exploitation of the nation's water power potential from 23 percent in 1975 to 30 percent in 1980. These include the Somes-Mariselu 220 megawatt hydroelectric power station, the Olt-Riureni 48 megawatt one, the Olt-Strejesti 50 megawatt one, the Olt-Arcesti 38 megawatt one, the Olt-Babeni 37 megawatt one, the Olt-Ionesti 38 megawatt one, the Olt-Zavideni 38 megawatt one, the Olt-Dragasani 41 megawatt one, the Sebes-Gilceag 150 megawatt one, the Prut-Stinga Costesti 15 megawatt one, and the Cerna-Motru 50 megawatt one. Note that besides their electric power output, those stations made a major contribution to improvement of the water supply of the communities and industries in the respective areas, to flood control, to supply of the irrigation systems with water, and to development of fisheries.

And finally, special emphasis was placed on conserving heat and electric power and fuel by promoting heating, reducing internal consumption in the electric power stations and networks, raising productivity in the existing production installations, eliminating any forms of waste of energy, etc.

/Question/ Do you consider them satisfactory?

/Answer/ Not at all. Though some results have been obtained, it can be said there are still many more possibilities and necessities of rationalizing and reducing consumption of electric power and fuel. Conservation of fuel and energy must be constantly pursued at every work place if we are to reduce fuel imports and better supply the national economy with energy.

It is true that thanks to the great efforts made the electric power output increased from 53.7 billion kilowatt-hours in 1975 to about 69 billion kilowatt-hours in 1980, or from 2,529 kilowatt-hours per capita in 1975 to 3,036 kilowatt-hours per capita in 1980, which is a major gain. But it is equally true that more definite steps must be taken to conserve energy.

In conclusion I would say that the 1976-1980 period and the year 1980 were concluded with good results in the way of exploitation of Romania's available energy resources, pointing out that the major increases in electric power production based on coal and water power led to the 17.5 percent reduction in electric power production based on hydrocarbons, which is equivalent to a saving of 2.27 million tons of conventional fuel in hydrocarbons. Moreover the efforts to rationalize heat and electric power saved the nation 11.4 billion kilowatt-hours and 2.7 million gram calories respectively in the last five-year plan.

/Question/ What was the evolution of the sector's technical-scientific progress? What changes were made? On what level are the technologies? To what extent are they "domestic production" or imported? In those years I attended various conferences and symposiums of power engineers, I heard many criticisms and suggestions, and many research results were presented. Have they been applied, and to what extent?

/Answer/ To a great extent, because otherwise it would have been impossible to obtain the present results either in supplying energy or in meeting the requirements for heat in the forms of industrial steam and hot water for industry and dwellings.

Among the major aims and trends of technical-scientific progress in our sector I would mention those for intensified use of inferior fuels through increased electric power production based on lignite and through development of the high-capacity power stations in the Oltenia basin and the heating plants burning lignite; for reduced consumption of hydrocarbons and especially of hydrocarbons added to maintain the fire in boilers burning inferior solid fuel; for reduced specific and internal industrial consumption in electric power stations and networks and increased total outputs of the thermoelectric power stations; for greater operating safety in the whole energy system; for a greater reserve of the units in the electric power stations in use, especially the 330 megawatt ones in the Rovinari and Turceni CTE's /Thermoelectric Power Plants/; introduction and improvement of the protection and automation systems; and the start and development of studies to exploit the new energy sources.

Note that the energy sector was developed in this stage according to our own studies and designs made in the Ministry of Electric Power with the collaboration of the national industry.

For instance, the first 330 megawatt units and 1,035 tons per hour boilers of Romanian manufacture were activated during the 1976-1980 period in the Rovinari and Turceni CTE's. These units operate with steam with high parameters and intermediate superheating and are designed like the best assemblies produced in countries with developed energy industries, making better use of the low-calory coal from the Oltenia coal region. Jointly with the Ministry of the Machine Building Industry, we are now concentrating on perfecting these assemblies.

In the same period construction was started at Anina of the first CTE for exploiting the bituminous shales of the Banat, an innovation in Romanian technology and even in world technology. We shall use our own experience and studies entirely in its construction.

Meanwhile development of district heating was continued as one of the main ways of conserving fuel. To carry out the district heating expansion program instituted by the 12th RCP Congress, the Ministry of Electric Power took steps to specially promote 420 tons per hour boilers with 50 megawatt units with counterpressure, 525 tons per hour boilers with 150 megawatt units with intermediate superheating, 120 tons per hour boilers with 12 megawatt counterpressure units, and small 3, 4 and 6 megawatt district heating units operating on coal. All this equipment is of Romanian design and manufacture, and with it we shall equip the heating plants designed to supply heat to the big urban centers and industrial districts.

Special emphasis was placed on the efforts to enhance the operating safety of the national energy system. For instance in the matter of checking the spread of breakdowns, on the basis of studies and research conducted in recent years we started to implement some new and more efficient types of automation, and the units of the Ministry of Electric Power assimilated manufacture of equipment for them.

And finally, in order to exploit the water power potential and to rationalize the operation of the water power installations, new techniques were applied to design as well as new methods of building these capacities. These included equipping the low-capacity hydroelectric power stations with units of the "bulb" type for more effective exploitation of the water power potential on the lower courses of streams, extended use of Francis type turbines at falls over 500 meters, expanded construction of dams with local materials (Vidra-Lotru, Valea lui Iovan-Motru, Casa-Sebes), construction of new types of microhydroelectric power stations, etc.

/Question/ How would you sum up the results of applying these modern technologies?

/Answer/ By the fact that a number of performances were obtained, such as for example the level of specific consumption of fuel and electric power in order to produce, transmit and distribute electric power, a level equivalent to that in the industrially developed countries.

/Question/ And in the field of exploiting the new energy sources (solar, wind etc.)?

/Answer/ An experimental installation was built for the solar-electric power station with flat collectors, in order to test the component elements (Freon turbine, heat exchangers, etc.), and several types of aerogenerators that will be used in pumping water into the reservoir lakes of hydroelectric power stations. Studies are also being made for future application to build solar-electric power stations to produce steam with high parameters, as well as studies for construction of wind-power installations with greater unit capacities.

/Question/ What have you done to reduce specific consumption of fuel and electric power to produce, transmit and distribute heat and electric power?

/Answer/ That has been and is a major concern of our ministry and its units, which have been concentrating mainly on two objectives in the field of heat and electric power production, namely reducing consumption of additional fuel (fuel oil and gases) in the steam boilers operating on coal by installing injectors with limited discharges, while studies and tests are being made to improve combustion in boilers and the coal-grinding installations now in manufacture; shifting some turbines to the "impaired vacuum" system in the thermoelectric power stations to increase the productivity of the assemblies and the overall output of the stations; improving the operation of the cooling installations and hydraulic circuits by introducing ball cleaning of the condensers of the steam turbines during operation (a technological process that has been introduced in 27 assemblies and will be introduced by 1985 in 10 more assemblies in the South Bucharest, Ternut, Mintia, West Bucharest, Oradea and Borzesti thermoelectric power stations); checking in the operation of the thermoelectric power stations the consumption norms set for each station (such as kilowatt-hours per ton of ground coal, kilowatt hours per cubic meter of processed water, energy reserves, etc.); and rationalizing and perfecting systems in the power stations' internal service installations.

/Question/ But the ministry has exceeded the regulation specific inputs.

/Answer/ Yes, it has. Due to some operational deficiencies, the still poor reliability of the 330 megawatt power units especially in the Rovinari and Turceni power stations, and deterioration of the quality (calorific power) of the coal below the plan provisions, specific consumption of fuel to produce electric power for the first three quarters of 1980 was above plan by 567,000 tons of conventional fuel throughout the Ministry of Electric Power as a whole. The coal-burning Rovinari, Turceni, Isalnita, Paroseni and Doicesti power stations especially contributed to this situation. What I can tell you is that we are making efforts to improve the situation and that we must redouble those efforts, but we need more help from the coal supplier, who must avoid deterioration of the quality of the coal and also take the necessary steps to enhance it and to make regular deliveries essential to homogenizing the coal.

/Question/ You said you are concentrating on two objectives. What is the second one?

/Answer/ The one in the field of transmission and distribution of electric power. In order to reduce internal technological consumption, a series of measures was adopted and implemented on the basis of intensive technical-economic studies and analyses to rationalize circulation of power and the voltage in the electric networks as well as the operating systems in the electric transformer stations; to shift some medium and high voltage networks to higher voltages; to reduce circulations of wattless power by installing synchronous phase-modifiers and static storage batteries; to introduce measurement and control installations and maintain them in good condition; to activate new electric networks (lines and stations) ahead of schedule, etc.

/Question/ How far do you think the operating safety of the energy system has been enhanced?

/Answer/ In this five-year plan the ministry has continued to enhance the operating safety of the National Energy System by modernizing the installations and technological systems in the electric power stations and by developing the power transmission and distribution networks in correlation with the needs of the national economy so as to stabilize the operation of the energy system in its entirety.

The system automations designed to prevent the spread of accidents have been improved and an overall automation system to prevent the spread of accidents is being designed. To improve management of the National Energy System by dispatcher, the new national energy dispatcher center in Bucharest and five regional centers have been activated, equipped with a modern long-distance information system making it possible to determine the state of the main installations in the system at any time.

Steps have also been taken to improve operations, maintenance and repair and to strengthen order and discipline among personnel. Regular efforts are made to improve selection and instruction of operational personnel, to increase the proportion of personnel with secondary and higher education working directly in the installations, to supplement the equipment of work places with technical instructions and technological work sheets, and to tighten control of the installations and activity of personnel.

I think all these efforts have improved the operation of the installations and enhanced the operating safety of the National Energy System as a whole, as indicated by a better supply of the consumers with thermal and electric power.

/19 Jan 81, pp 1, 5/

/Text/ /Question/ What can you tell us about the major aims and trends of the sector in the 1981-1985 period? What are its main tasks?

/Answer/ The main directions of development of Romanian power engineering specified in the documents of the 12th RCP Congress are toward continued growth of electric power production based on coal, on water power resources, on secondary energy resources and on new resources, on the basis of rational consumption of heat and electric power allowing both for exploitation of the energy sources existing in Romania and for possibilities of conserving energy in the industrial processes. Our 1981 plan calls for priority completion of some highly important capacities to supply all consumers, present and new, with heat and electric power. New capacities will be activated in the thermoelectric power stations amounting to 1,290 megawatts, including two 330 megawatt units at Turceni, 200 megawatts at Doicesti, 330 megawatts at Anina and 50 megawatts at Borzesti, all operating on coal, and others operating on

secondary energy resources: 50 megawatts at Navodari and 50 megawatts at Brazi II. Among the latter I would note the construction of the first thermoelectric power station that will utilize bituminous shales with an inferior calorific power.

New capacities will also be installed in the hydroelectric power stations, namely 70 megawatts at Olt-Turn, 38 megawatts at Olt-Calimanesti, 115 megawatts at Lotru-Bradisor, 13 megawatts at Olt-Slatina, et al.

In all an increase of 5.3 billion kilowatt-hours in electric power production from 1980 is planned for 1981. Electric power produced from coal will be increased more, namely by 9.5 billion kilowatt-hours, and an increase of 1.? billion kilowatt-hours is expected for hydroelectric power. And finally, the volume of construction-installation operations planned for 1981 is up 14 percent from 1980.

Secondary energy sources and new sources introduced in Romania's energy cycle will also be increased in 1981. Electric power production based on those resources will be increased from 4 percent in 1980 to 5.4 percent in 1981 of the electric power output based on hydrocarbons and secondary energy resources. The necessary steps will be taken for the new installations to attain the planned parameters promptly.

Of course in constructing all the capacities we have planned, we tried to allow for the current technical requirements. Automations in the National Energy System have been perfected, and new action and control devices are being made. It is also intended to enhance the safety of all installations of the energy system and to select the best systems of operation for conserving energy in the production and transmission of heat and electric power. Research and design will also have a very important part to play in increasing the productivity of existing installations, in determining new technologies for use of all possible sources of heat and electric power including the so-called unconventional ones (solar, wind, geothermal etc.), and in producing these forms of energy (electric and thermal) as efficiently as possible.

/Question/ What will the ministry's units do to consolidate the new economic-financial mechanism, self-management and self-administration?

/Answer/ Our plans to consolidate the new economic-financial mechanism, self-management and self-administration pursue the following ends in every unit and throughout the whole ministry: greater operating safety of the National Energy System and continuous supply of the consumers with heat and electric power; fulfillment in every unit of the plan tasks for physical production of heat and electric power based on coal; conformity to the norms for specific consumption of fuel and internal industrial consumption for production, transmission and distribution of heat and electric power; improved management and administration of coal; reduction below plan and allotments of internal consumption of heat and electric power; reduction of the cost of maintenance and repair operations, with complete and efficient performance of the physical volume of strictly necessary operations; reconditioning of materials and spare parts and reuse of them, efficient use of the total reserve of working time of working personnel, provision for an optimal ratio between productive and auxiliary personnel, tightened labor discipline and greater labor productivity; further reduction of total production costs and especially of material outlays; implementing and exceeding the profits plan; use of the budget of incomes and outlays as a regular tool for managing the economic-financial activity of each unit, for analyzing the activity and for promptly determining the measures for complete implementation of the tasks in the plan and the state budget and, finally, provision for a balanced financial situation and integrity of public property, strict observance of national laws,

strengthened order and discipline, good management of material and financial values, and the best exercise of all forms of control.

As you see we have very serious plans of this kind, which we shall pursue with perseverance.

/Question/ What plans have you to ensure the consumers' energy supply with greater safety?

/Answer/ We think greater safety in the electric power supply of the consumers and especially of the big industrial districts is one of the main tasks of our operational units. Therefore a number of programs are specified in the 1981-1985 Five-Year Plan to improve the quality of this activity, among which I mention activation of new installations in the National Energy System; development of system automation to complete the effort to insularize the power stations in the big industrial districts, performance of automation operations in power stations and networks for which the technical measures have been determined and the final designs have been drafted, and new studies in this field to determine new measures for our energy system; improvement of efficient management and operations through development of the equipment with process computers and development of the information system at the county dispatcher level and in the main transformer stations; introduction and expansion of new technologies like work directly under voltage without interruption of the installations; and further improvement of professional training of personnel, using specialized modern equipment for the purpose. And finally, when repairs are made weaknesses that still exist in installations will be eliminated, the insulation of overhead power lines and transformer stations will be replaced where it is found to have deteriorated in time, and special measures will also be taken to protect the insulation in hazardous areas.

/Question/ What plans have you to reduce specific consumption in production and distribution of energy?

/Answer/ First we shall expand combined production of electric power and heat, as well as the shift to assimilation of part of the heat of the steam turbine condensers (impaired vacuum) in the Mintia, Isalnita, Paroseni and Doicesti thermoelectric power stations. We shall also take steps to improve the combustion system in the boiler furnaces in order to enhance their productivity and stabilize combustion for purposes of reducing the input of additional hydrocarbons and reducing the quantities of water and coal residues.

Postcombustion gratings will be installed in the Doicesti, Isalnita, Rovinari, Turceni and other power stations operating on coal, which will help to considerably reduce the percentage of unburned coal in the slag and ashes emptied from the boilers.

Heat consumers located at very distant points like Tirgu Jiu, Tirgoviste and Petrosani will be connected to the power stations burning solid fuel.

In order to reduce the internal industrial consumption in transmission and distribution of electric power, we have planned measures to rationalize the voltage levels and circuits, expedite repairs on the lines, and introduce work under voltage; to revise the present regulations with norms and standards for the characteristics of the energy input; to determine the amount of power admitted at various times of the day, the power factor, and the content of harmonics and permissible asymmetry; and

to expedite some investment projects specified in the 1981-1985 Five-Year Plan and implement new projects in both the transmission and distribution networks. We shall also check implementation in other ministries of the measures specified in plans to compensate for wattless power and improve the structure of the internal networks.

/Question/ What are the plans to intensify recovery and reuse of slags and ashes from power stations?

/Answer/ In accordance with the tasks assigned by the higher administration to intensify exploitation of ashes from thermoelectric power stations, the Ministry of Electric Power took steps to be able to deliver during the 1981-1985 period the quantities requested by the users, namely about 6 million tons of ashes dried by electric filter and about 3.5 million tons of wet dump ashes.

In 1981-1982 the capacities for reception and delivery of ashes from the electric filters at the Isalnita CET /Thermoelectric Power Plant/, the Rovinari CTE, the Doicesti CTE and the Mintia CTE will be enlarged and modernized, and the dumps at the Paroseni, Mintia, Comanesti, Oradea, Isalnita, Doicesti, Turceni and Rovinari thermoelectric power stations from which wet ashes will be extracted will be improved and equipped.

To carry out these tasks, the Ministry of Electric Power, the Ministry of Forestry Economy and Construction Materials, the Ministry of Industrial Construction, and the Committee on Problems of the People's Councils are preparing a "Special Program to Exploit Ashes from Thermoelectric Power Stations in the 1981-1985 Period."

/Question/ What do you expect of the collaborating sectors? How far do you depend upon this collaboration?

/Answer/ The program for heat and electric power production, along with further reduction of industrial consumption and rational use of heat and electric power, cannot be implemented without the direct collaboration of all sectors of the national economy.

For example, the Ministry of the Machine Building Industry must begin making more productive equipment, steam and hot water boilers with complete elimination of hydrocarbon consumption, and such modern equipment as encapsulated high-voltage electrical installations, dry transformers and high-voltage electric cables, and it must begin assimilating equipment and devices that are now imported (reducing-cooling stations, electric dischargers, some safety relays, etc.) that will permit construction of energy capacities that operate safely and economically. It is also necessary to expedite manufacture of equipment and installations needed to carry out the program for use of the new energy sources, solar, wind, thermal pumps etc.

A particular problem we submit to the suppliers of energy equipment under the Ministry of the Machine Building Industry concerns the spare parts for maintenance and repair of this equipment in operation. There is also a demand upon the Ministry of the Metallurgical Industry and the Ministry of the Chemical Industry to make materials vital to the energy sector that are now scarce or imported such as high-voltage conduits, ion masses and a number of special sets. We also ask the Ministry of Forestry Economy and Construction Materials to help us by making special reinforced concrete pipes essential to the district heating networks to reduce metal consumption considerably.

We must point out in particular the need of better collaboration from the mining enterprises for the quantitative and qualitative supply of the CTE's with solid fuel

in order to produce heat and electric power on the planned level.

On the other hand the units consuming heat and electric power must try to rationalize the operating system of the energy installations to obtain minimal specific consumption of energy. To this end they must better conform to the values of power and energy contracted for as well as the requirements concerning compensation for wattless power, filtering the harmonics , and reducing the asymmetries.

In conclusion, as you have seen the tasks that await us are great and difficult but very important to national economic development. And so I should like to assure the readers of ROMANIA LIBERA and all Romanian citizens that the great corps of power engineers will spare no effort to carry out all the specified plans and all the directions of the higher administration and Nicolae Ceausescu in person to provide the energy and heat essential to the national economy with the greatest efficiency and safety.

5186
CSO: 2700

ALLOCATION OF FOREIGN EXCHANGE FOR 1981

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 2, 16 Jan 81 pp 73-80

[Order issued by the Federal Executive Council in Belgrade on 12 January 1981 and signed by its chairman Veselin Djuranovic: "Order on Allocation of Foreign Exchange To Meet the Needs of Federal Bodies and Agencies and for Exercise of the Rights and Discharge of the Duties of the Federation in 1981"]

[Excerpts] 1. Foreign exchange to meet the needs of federal bodies and agencies and for exercise of the rights and discharge of the duties of the Federation, as set forth in Point 2 of Subparagraph 2 of the Order Fixing the Total Amount of Foreign Exchange for the Federation in 1981 (SLUZBENI LIST SFRJ, No 74, 1980), in the amount equivalent to 24,993,925,300 dinars, may be used for visible and invisible payments of federal bodies, agencies and organizations, designated bodies of public organizations and institutions performing tasks pertinent to performance of the functions of the Federation and performing their activity over the entire territory of the Socialist Federal Republic of Yugoslavia, if resources from their own revenues are not adequate to perform those tasks, as well as to meet other needs of the Federation, specifically as follows:

	Dinars
1) For invisible payments--up to the amount of	3,234,077,000
2) For visible payments--up to the amount of	21,127,053,000

The amount of 632,795,300 dinars is set aside from the total amount of foreign exchange as stated in Paragraph 1 of this point to meet unforeseen and underestimated expenditures (reserve resources).

In response to applications by competent controllers the federal secretary for finance is hereby authorized to allow release of the funds from the reserve referred to in Paragraph 2 of this point, such release not to exceed the amount of 100,000 dinars in each individual case.

2. The allocation of foreign exchange for 1981 which is printed along with this order and is an integral part of it sets forth the highest amounts of

foreign exchange for individual users within the limits of the amounts stated in Paragraph 1 of Point 1 of this order.

3. Of the total amount of foreign exchange stated in Point 1 of this order 80 percent may be used in convertible foreign exchange and 20 percent in other foreign currencies.

The federal secretary for finance is authorized to allow individual users to use foreign exchange in larger or smaller percentages than the percentages set forth in Paragraph 1 of this point provided the total amount of foreign exchange in convertible currencies does not exceed 80 percent.

Foreign Exchange Allocation for 1981

No	User	Amount, in dinars	
1	2	3	
1	State Presidency of the Socialist Federal Republic of Yugoslavia		
	Invisible payments:		
	Official travel	5,000,000	
	Miscellaneous payments	360,000	5,360,000
	Visible payments		1,365,000
	Total		6,725,000
2	Service for Entertainment Facilities of the State Presidency of the Socialist Federal Republic of Yugoslavia		
	Invisible payments:		
	Official travel	54,000	
	Miscellaneous payments	682,000	736,000
	Visible payments		1,668,000
	Total		2,404,000
3	SFRY Assembly		
	Invisible payments:		
	Official travel	4,433,000	
	Assessments	650,000	
	Miscellaneous pyaments	15,000	5,098,000
	Visible payments		11,550,000
	Total		16,648,000

1	2	3	
4	Council of the Federation		
	Invisible payments:		
	Official travel		78,000
	Total		78,000
5	Administration of Brioni Islands		
	Invisible payments:		
	Official travel	54,000	
	Miscellaneous payments	2,180,000	2,234,000
	Visible payments		1,889,000
	Total		4,123,000
6	Federal Executive Council		
	Invisible payments:		
	Official travel	18,436,000	
	Assessments	24,300,000	
	Miscellaneous payments	262,000	42,998,000
	Visible payments		86,642,000
	Total		129,640,000
7	Service for Defense Preparations of the Federal Executive Council		
	Visible payments		5,000,000
	Total		5,000,000
8	Translation Service of the Federal Executive Council		
	Invisible payments:		
	Official travel		618,000
	Visible payments		930,000
	Total		1,548,000
9	Constitutional Court of Yugoslavia		
	Invisible payments:		
	Official travel		42,000
	Total		42,000

1	2	3	
10	Federal Court		
	Invisible payments:		
	Official travel		60,000
	Total		60,000
11	Federal Public Prosecutor's Office		
	Invisible payments:		
	Official travel		100,000
	Total		100,000
12	Federal Solicitor General's Office		
	Invisible payments:		
	Official travel		126,000
	Total		126,000
13	Federal Public Defender of Self-Management Law		
	Invisible payments:		
	Official travel		44,000
	Total		44,000
14	Federal Secretariat for Foreign Affairs		
	Invisible payments:		
	Official travel	37,795,000	
	Missions	1,809,815,000	
	Assessments	70,646,000	
	Miscellaneous payments	13,511,000	1,931,767,000
	Visible payments		48,245,000
	Total		1,980,012,000
15	Federal Secretariat for National Defense		
	Invisible payments:		
	Official travel	7,008,000	
	Missions	92,739,000	

1	2	3	
	Assessments	450,000	
	Medical treatment abroad	7,505,000	
	Specialized training	58,968,000	
	Miscellaneous payments	6,570,000	173,240,000
	Visible payments		19,797,245,000
	Total		19,970,485,000
16	Federal Secretariat for Internal Affairs		
	Invisible payments:		
	Official travel	5,000,000	
	Assessments	3,000,000	
	Specialized training	1,383,000	
	Miscellaneous payments	102,500,000	111,883,000
	Visible payments		123,014,000
	Total		234,897,000
17	Federal Secretariat for Finance		
	Invisible payments:		
	Official travel	1,800,000	
	Assessments	40,950,000	
	Transfer of legacies	15,000,000	
	Miscellaneous payments	60,092,000	117,842,000
	Total		117,842,000
18	Federal Secretariat for Foreign Trade		
	Invisible payments:		
	Official travel	1,500,000	
	Assessments	12,274,000	13,774,000
	Total		13,774,000
19	Federal Secretariat for the Market and General Economic Affairs		
	Invisible payments:		
	Official travel	244,500	
	Assessments	3,467,500	3,712,000
	Total		3,712,000

1	2	3	
20	Federal Secretariat for Jurisprudence and Organization of the Federal Administration		
	Invisible payments:		
	Official travel	488,000	
	Assessments	229,000	717,000
	Total		717,000
21	Data Processing Center of Federal Bodies and Agencies		
	Invisible payments:		
	Official travel	33,000	
	Miscellenaous payments	200,000	233,000
	Visible payments		6,626,000
	Total		6,859,000
22	Federal Secretariat for Information		
	Invisible payments:		
	Official travel	2,370,000	
	Miscellaneous payments	1,800,000	4,170,000
	Visible payments		7,000,000
	Total		11,170,000
23	Federal Committee for Energy and Industry		
	Invisible payments:		
	Official travel	1,099,000	
	Assessments	876,000	1,975,000
	Total		1,975,000
24	Federal Committee for Agriculture		
	Invisible payments:		
	Official travel	2,137,000	
	Assessments	28,383,000	
	Miscellaneous payments	1,640,000	32,160,000
	Total		32,160,000

1	2	3	
25	Federal Committee for Transportation and Communications		
	Invisible payments:		
	Official travel	1,911,000	
	Assessments	8,886,000	10,797,000
	Total		10,797,000
26	Federal Committee for Labor, Health and Social Welfare		
	Invisible payments:		
	Official travel	1,430,000	
	Assessments	37,013,000	38,443,000
	Total		38,443,000
27	Federal Bureau for Employment Security		
	Invisible payments:		
	Official travel	726,000	
	Branch offices	238,000	964,000
	Total		964,000
28	Federal Committee for Affairs of Veterans and Disabled Veterans		
	Invisible payments:		
	Official travel	114,000	
	Medical treatment abroad	2,000,000	
	Miscellaneous payments	2,640,000	4,754,000
	Total		4,754,000
29	Federal Customs Administration		
	Invisible payments:		
	Official travel	619,000	
	Assessments	1,340,000	1,959,000
	Visible payments		50,735,000
	Total		52,694,000

1	2	3	
30	Federal Flight Control Administration		
	Invisible payments:		
	Official travel	421,000	
	Assessments	140,000	
	Specialized training	1,185,000	
	Miscellaneous payments	3,300,000	5,046,000
	Visible payments		300,000,000
	Total		305,046,000
31	Federal Administration for Radio Communications		
	Invisible payments:		
	Official travel	328,000	
	Specialized training	49,000	
	Miscellaneous payments	165,000	542,000
	Visible payments		6,182,000
	Total		6,724,000
32	Federal Market Inspectorate		
	Invisible payments:		
	Official travel		99,000
	Total		99,000
33	Federal Foreign Exchange Inspectorate		
	Invisible payments:		
	Official travel		466,000
	Total		466,000
34	Federal Aviation Inspectorate		
	Invisible payments:		
	Official travel	497,000	
	Assessments	120,000	
	Miscellaneous payments	27,000	644,000
	Visible payments		438,000
	Total		1,082,000

1	2	3	
35	Federal Bureau for Social Planning		
	Invisible payments:		
	Official travel		367,000
	Visible payments		600,000
	Total		967,000
36	Federal Bureau for Prices		
	Invisible payments:		
	Official travel		73,000
	Total		73,000
37	Federal Bureau for International Scientific, Educational and Cultural, and Technical Cooperation		
	Invisible payments:		
	Official travel	4,824,000	
	Assessments	31,357,000	
	Miscellaneous payments	45,000,000	81,181,000
	Total		81,181,000
38	Federal Bureau of Statistics		
	Invisible payments:		
	Official travel	395,500	
	Assessments	16,500	412,000
	Visible payments		16,826,000
	Total		17,238,000
39	Federal Hydrometeorology Bureau		
	Invisible payments:		
	Official travel	209,000	
	Assessments	14,277,000	
	Miscellaneous payments	205,000	14,691,000
	Visible payments		11,926,000
	Total		26,617,000

1	2	3	
40	Federal Bureau for Standardization		
	Invisible payments:		
	Official travel	535,000	
	Assessments	2,486,000	3,021,000
	Visible payments		787,000
	Total		3,808,000
41	Federal Bureau for Patent		
	Invisible payments:		
	Official travel		178,000
	Visible payments		1,000,000
	Total		1,178,000
42	Federal Bureau for Weights and Standards and Precious Metals		
	Invisible payments:		
	Official travel	148,000	
	Assessments	800,000	
	Miscellaneous payments	27,000	975,000
	Visible payments		869,000
	Total		1,844,000
43	Federal Geology Bureau		
	Invisible payments:		
	Official travel		170,000
	Total		170,000
44	Federal Directorate for Food Reserves		
	Invisible payments:		
	Official travel		200,000
	Total		200,000

1	2	3	
45	Federal Directorate for Reserves of Industrial Products		
	Invisible payments:		
	Official travel		510,000
	Total		510,000
46	Service To Meet the Entertainment Needs of Federal Bodies and Agencies		
	Invisible payments:		
	Official travel	1,105,000	
	Miscellaneous payments	20,500,000	21,605,000
	Visible payments		29,031,000
	Total		50,636,000
47	Service To Handle the Administrative and Accounting Functions of Federal Administrative Agencies and Federal Organizations		
	Visible payments		4,000,000
	Total		4,000,000
48	Garage of Federal Bodies and Agencies		
	Visible payments		2,099,000
	Total		2,099,000
49	Administration of Office Buildings of Federal Bodies and Agencies		
	Invisible payments:		
	Official travel		120,000
	Visible payments		4,107,000
	Total		4,227,000

1	2	3	
50	Federal Fund for Credit Financing the Faster Development of the Economically Underdeveloped Republics and Autonomous Provinces		
	Invisible payments:		
	Official travel		143,000
	Total		143,000
51	Presidium of the Central Committee of the League of Communists of Yugoslavia		
	Invisible payments:		
	Official travel	700,000	
	Miscellaneous payments	1,000,000	1,700,000
	Visible payments		5,000,000
	Total		6,700,000
52	Work Organization To Render Services and Maintain the Building of the LCY Central Committee and the Central Committee of the League of Communists of Yugoslavia Referred to as the "Central Committee Palace"		
	Invisible payments:		
	Official travel	27,000	
	Miscellaneous payments	1,127,000	1,154,000
	Visible payments		7,846,000
	Total		9,000,000
53	Federal Conference of the Socialist Alliance of Working People of Yugoslavia		
	Invisible payments:		
	Official travel	3,304,000	
	Miscellaneous payments	6,500,000	9,804,000
	Total		9,804,000

1	2	3	
54	Presidium of the Conference of the Socialist Youth Federation of Yugoslavia		
	Invisible payments:		
	Official travel	2,031,000	
	Miscellaneous payments	173,000	2,204,000
	Total		2,204,000
55	Federation of Associations of Veterans of the National Liberation War of Yugoslavia		
	Invisible payments:		
	Official travel	601,000	
	Assessments	35,000	636,000
	Total		636,000
56	Council of the Federation of Yugoslav Trade Unions		
	Invisible payments:		
	Official travel	3,070,000	
	Assessments	450,000	
	Miscellaneous payments	3,196,000	6,716,000
	Visible payments		1,100,000
	Total		7,816,000
57	Presidium of the Red Cross of Yugoslavia		
	Invisible payments:		
	Official travel	781,000	
	Assessments	1,339,000	
	Miscellaneous payments	1,609,000	3,729,000
	Total		3,729,000

1	2	3	
58	Yugoslav League for Peace, Independence and Equality of Nations		
	Invisible payments:		
	Official travel	357,000	
	Assessments	10,000	367,000
	Total		367,000
59	Yugoslav Federation of United Nations Associations		
	Invisible payments:		
	Official travel	101,000	
	Assessments	36,000	137,000
	Total		137,000
60	Yugoslav Federation for Physical Education		
	Invisible payments:		
	Official travel	8,140,000	
	Assessments	1,756,000	
	Miscellaneous payments	100,000	9,996,000
	Visible payments		2,608,000
	Total		12,604,000
61	Popular Technology--Yugoslav Federation of Organizations for Popular Technical Education		
	Invisible payments:		
	Official travel	300,000	
	Assessments	248,000	548,000
	Visible payments		170,000
	Total		718,000
62	Yugoslav Federation of Firefighters		
	Invisible payments:		
	Official travel	241,000	
	Assessments	31,000	272,000
	Total		272,000

1	2	3	
63	Yugoslav Tourist Federation		
	Invisible payments:		
	Official travel	81,000	
	Representative offices	72,581,000	
	Miscellaneous payments	34,297,000	106,959,000
	Total		106,959,000
64	Yugoslav Council for Traffic Safety		
	Invisible payments:		
	Official travel	110,000	
	Assessments	50,000	160,000
	Total		160,000
65	Public Organizations		
	Invisible payments:		
	Official travel	4,000,000	
	Assessments	4,000,000	
	Miscellaneous payments	1,150,000	9,150,000
	Visible payments		200,000
	Total		9,350,000
66	Social Accounting Service of Yugoslavia		
	Invisible payments:		
	Official travel	375,000	
	Assessments	140,000	
	Miscellaneous payments	3,000,000	3,515,000
	Visible payments		365,425,000
	Total		368,940,000
67	National Bank of Yugoslavia		
	Invisible payments:		
	Official travel	2,172,000	
	Assessments	60,000	
	Miscellaneous payments	172,000	2,404,000
	Visible payments		104,678,000
	Total		107,082,000

1	2	3	
68	Economic Chamber of Yugoslavia		
	Invisible payments:		
	Official travel	3,700,000	
	Missions	116,832,000	
	Fairs and exhibitions	81,000,000	
	Assessments	2,000,000	
	Miscellaneous payments	1,500,000	205,265,000
	Visible payments		2,000,000
	Total		207,032,000
69	Cooperative Federation of Yugoslavia		
	Invisible payments:		
	Official travel	366,000	
	Assessments	246,000	612,000
	Total		612,000
70	TANJUG News Agency		
	Invisible payments:		
	Official travel	2,809,000	
	Foreign bureaus	63,339,000	
	Assessments	543,000	
	Miscellaneous payments	29,504,000	96,195,000
	Visible payments		10,447,000
	Total		106,642,000
71	Yugoslav National Committee of the International Board of Trade		
	Invisible payments:		
	Official travel	90,000	
	Assessments	213,000	303,000
	Total		303,000
72	Yugoslav Federation of Health Insurance and Health Care Communities		
	Invisible payments:		
	Official travel	90,000	
	Health care	58,275,000	58,365,000
	Total		58,365,000

1	2	3	
73	Yugoslav Federation of Old-Age and Disability Insurance Communities		
	Invisible payments:		
	Official travel	90,000	
	Assessments	630,000	720,000
	Total		720,000
74	Yugoslav Archives		
	Invisible payments:		
	Official travel	62,000	
	Assessments	184,000	246,000
	Total		246,000
75	Filmske novosti [Newsreels]		
	Invisible payments:		
	Official travel	202,000	
	Assessments	30,000	232,000
	Visible payments		3,580,000
	Total		3,812,000
76	Institution To Maintain Maritime Waterways		
	Visible payments		12,410,000
	Total		12,410,000
77	Institution To Maintain Inland Waterways		
	Invisible payments:		
	Official travel	122,000	
	Assessments	50,000	172,000
	Visible payments		2,573,000
	Total		2,745,000
78	Yugoslav Register of Ships		
	Visible payments		2,730,000
	Total		2,730,000

1	2	3	
79	Sluzbeni List SFRJ [Official Gazette of the SFRY] Newspaper Institution		
	Invisible payments:		
	Official travel		289,000
	Visible payments		38,203,000
	Total		38,492,000
80	Yugoslav Center for Scientific and Technical Documentation		
	Invisible payments:		
	Official travel	103,000	
	Assessments	54,000	
	Miscellaneous payments	80,000	237,000
	Visible payments		2,816,000
	Total		3,053,000
81	Yugoslav Radio and Television		
	Invisible payments:		
	Official travel	2,031,000	
	Assessments	27,500,000	
	Miscellaneous payments	26,606,000	56,137,000
	Visible payments		654,000
	Total		56,791,000
82	Komunist Newspaper Publishing Enterprise		
	Invisible payments:		
	Official travel	700,000	
	Miscellaneous payments	2,260,000	2,960,000
	Visible payments		30,000
	Total		2,990,000
83	Borba Newspaper Publishing and Printing Enterprise		
	Invisible payments:		
	Official travel	3,449,000	
	Foreign bureaus	9,052,000	
	Miscellaneous payments	4,228,000	16,729,000

1	2	3
	Visible payments	44,542,000
	Total	61,271,000
84	Geomagnetic Institute	
	Invisible payments:	
	Official travel	70,000
	Visible payments	267,000
	Total	337,000
	Grand Total	24,361,130,000

7045
CSO: 2800

DEVELOPMENT OF COMPUTER SOFTWARE CAPABILITY IN NIS

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 31 Jan-2 Feb 81 p 13

[Article by M. Petrovic: "Computer's Secrets on the User's Palm"]

[Text] Good news for those who have or now intend to purchase computers: EI [Electronics Industry] in Nis, aside from its endeavor to enter into all the secrets of manufacturing these complicated machines, has been recently paying more and more attention as well to that other area without which a computer's use is unthinkable--software. A business unit known as Automatic Data Processing Engineering for Information Systems began operating recently in Belgrade as part of the Computer Factory of EI--Nis. It now has a work force of 40, mainly university-trained people, whose principal task is to offer complete intellectual services to computer owners in connection with the use of these machines and, of course, the work of translating them, as they put it here, into domestic equipment.

"This is the embryo of a future software company," says Vojislav Milojkovic, graduate engineer and Systems Support. "We think we should look for a way of getting ahead in the software field. The actual manufacture of the machines has taken great strides in the world and is changing rapidly. It is not easy to keep up with the very rapid changes in this field in view of the fact that over just the last 10 years the size of a computer of the same capacity has decreased to less than one-tenth of what it was, especially since keeping pace with the world also presupposes tremendous investments in development."

In this situation the most effective way of developing domestic computer production, in addition to mastering hardware and designing our own computer, is the transfer of knowledge and rapid mastery of software. This is the direction that has been taken by the Computer Factory in Nis, and together with Progres--Informatika it has signed a contract on a joint venture with the Honeywell firm, a well-known world manufacturer, from which a license for the manufacture of medium-capacity computers has been purchased. This firm has committed itself to the transfer of technology and complete knowledge for the manufacture and use of computers and complete familiarization with its capabilities in the software field. This applies

both to the present product and to all generations which will follow from it, including all improvements in the machine itself and also in its software. The contract with the Honeywell firm offers EI the possibility of thorough mastery of production, Milojkovic stressed, and that means not only to the level of printboards, but also chips and integrated circuits as well as the incorporation of certain domestic design features.

"Yet our opportunity lies in developing the software part of the computer, first of all because we have no difficulty providing enough highly trained specialists," Vojislav Milojkovic stressed. "In this respect our capabilities are even better than in other countries. Moreover, software is constituting an ever larger part of the computer's total value. The relationships are such today that the machine itself--the computer--constitutes a smaller and smaller portion of its value, and that of the software is larger and larger. Only some 10 years ago the situation was the reverse."

People at EI feel that thanks to this kind of development of computer manufacture and parallel creation of a strong software firm could do much to substitute for the leasing of foreign computers, which is rather widespread and unfavorable. Lacking funds to invest in equipment, domestic computer users have turned to leasing, and since present regulations make it impossible for them to be replaced, more than 120 computers, mainly amortized, are in use in the country, and there is no possibility of replacing them with new and more up-to-date machines. If the money being spent today for leasing were applied to the purchase of materials necessary for domestic production, about 70 percent of the leased computers could very quickly be replaced by domestic products. This would also be of benefit to EI, since in that way it would pay off the license it has purchased, but it would be beneficial to all others as well. After all, it is more economically advantageous to pay for a license once than to pay for it over and over again every time a computer is imported.

"Achieving this means creating a strong software firm that would render a high quality of services and would make it possible for present programs and data to be rapidly converted to computers manufactured in Yugoslavia. If this is done successfully," Vojislav Milojkovic stressed, "new opportunities would be created for the export of computers and intellectual services, especially to the developing countries. Not only would the creation of this intellectual base to assist the user diminish our outflow of foreign exchange, but it would also be possible to achieve an inflow."

7045
CSO: 2800 END

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O March 1981